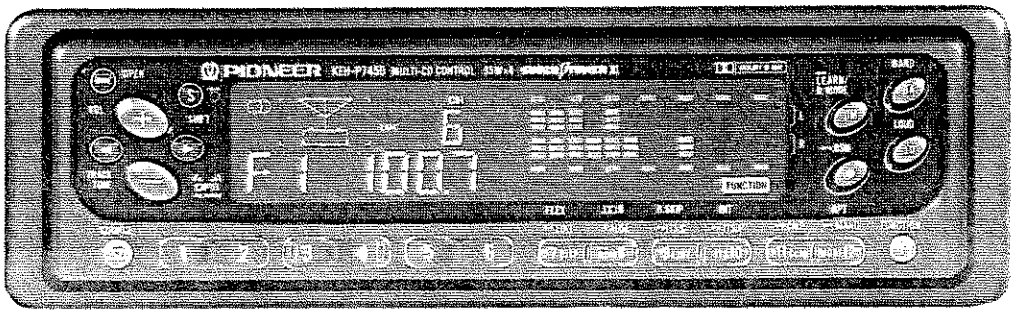
Multi-CD control High power cassette player
with FM/AM tuner

SUPER TUNER III

KEH-P7450
KEH-P7450-W

Operation Manual



KEH-P7450

PIONEER®

The Art of Entertainment

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About This Manual

This tuner/cassette player features a number of sophisticated functions ensuring superior reception and operation. All are designed for the easiest possible use, but many are not self-explanatory. This operation manual is intended to help you benefit fully from their potential and to maximize your listening enjoyment.

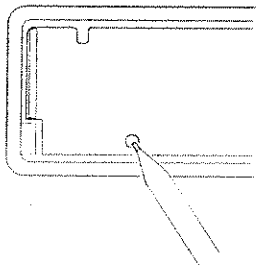
We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using the tuner/cassette player. It is especially important that you read and observe the "Precaution" on the next page and in other sections.

In this Operation Manual, the Basic Operation for each sound source is outline at the beginning of its explanation, covering simple operation for that source, such as merely playing music.

Resetting the Microprocessor

The microprocessor must be reset under the following conditions:
When using this tuner/cassette player for the first time after installation.
When the machine fails to operate properly.
When strange (incorrect) messages appear on the display.

- **To reset the microprocessor, remove the front panel as described on page 44 and press the Reset button on the head unit with a pen tip or other pointed instrument.**

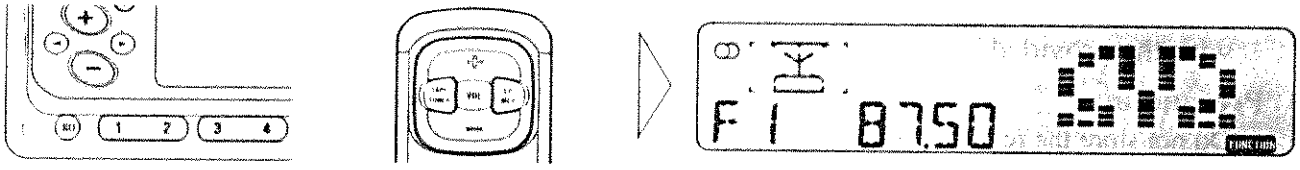


Precaution

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough for outside sounds to be audible.
- Protect the tuner/cassette player from moisture.
- If the battery is disconnected, the preset memory will be erased and must be reprogrammed.
- If this product fails to operate properly, contact your dealer or your nearest authorized PIONEER Service Station.

Switching Power On

- **Select the desired source (such as the tuner).**



■ Head Unit:

Each press of the SO button selects the desired source in the following order:
Tape → Tuner → Multi-CD player → CD player (one disc only) → AUX → OFF

■ Remote Controller:

Each press of the TAPE/TUNER button selects the desired source in the following order:
Tape → Tuner → OFF

Each press of the CD/MCD button selects the desired source in the following order:
Multi-CD player → CD player (one disc only) → OFF

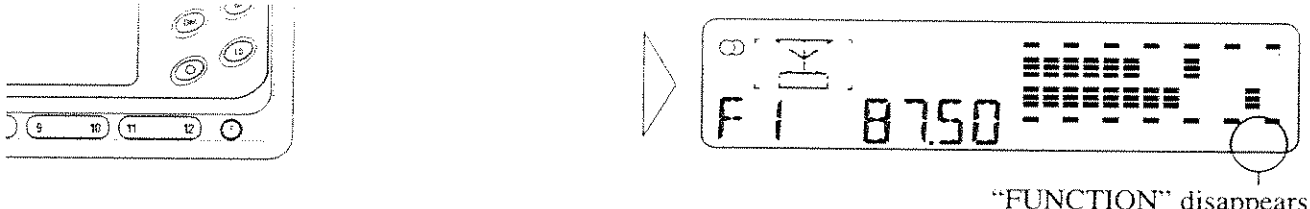
Note:

- In the following cases, the sound source will not change:
  - * No Multi-CD player is connected to this unit.
  - * No cassette tape is set in this unit.
  - * No magazine is set in the Multi-CD player.
  - * No disc is set in the CD player.
  - * AUX (external input) is set to OFF. (See page 43.)

Function Switching

Generally speaking, operation is conducted with Function ON. It is conducted with Function OFF in the following cases:
Tuner:
Preset Memory
Recalling Preset Stations
Multi-CD player:
Using the head unit for Disc Number Search

- **Switch function OFF.**



"FUNCTION" disappears

To switch function ON, repeat the preceding operation.

Using the Remote Controller

This product is equipped with a remote controller for convenient operation.

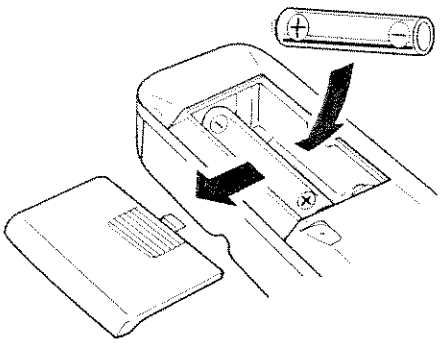
- Point the controller in the direction of the front panel to operate.
- When the controller is not in use, attach it firmly to the center console with the provided Velcro tape.

Precaution:

- Do not store the remote controller in high temperatures or direct sunlight.
- The controller may not function properly in direct sunlight.
- Do not let the remote controller fall onto the floor, where it may become jammed under the brake or accelerator pedal

■ Batteries

- **Remove the cover on the back of the remote controller and insert the batteries with the (+) and (–) poles pointing in the proper direction.**



Note:

- Use only **AAA** or **IEC R03** 1.5 V batteries.

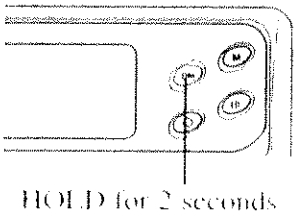
Precaution:

- Remove the batteries if the remote controller is not used for a month or longer.
- Do not attempt to recharge the supplied batteries.
- Do not mix new and used batteries.
- If the event of battery leakage, wipe the remote controller completely clean and install new batteries.

Remote Controller Learn Function

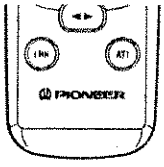
The remote controller's Learn function enables you to program the LRN button to perform the functions of any head unit button, except the Open function.

1. **Select the Learn mode.**



2. **Press the button on the head unit whose function you want the remote controller to perform within 8 seconds.**

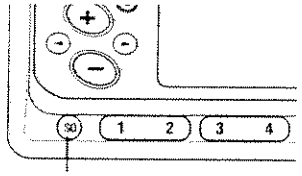
3. **Confirm that the function of the button you have just programmed operates correctly.**



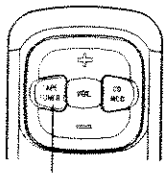
Basic Operation of Tuner

Reset the tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America. (See page 12.)

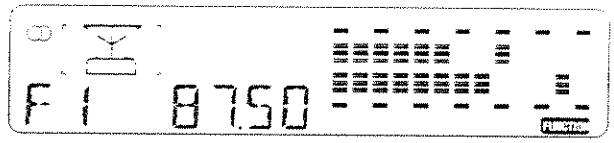
1. Select Tuner. (See page 5.)



Each press changes the Source ...

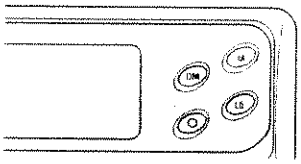


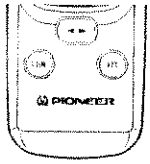
Each press changes the Source ...

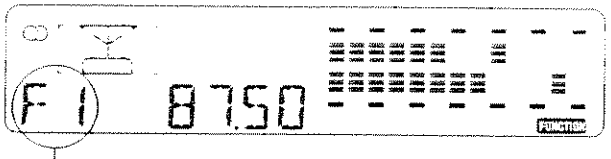


Frequency appears on the display.
("⊙" indicator lights when a stereo station is selected.)

2. Select the desired band.

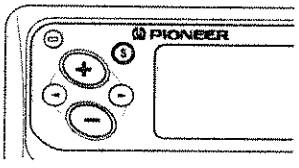


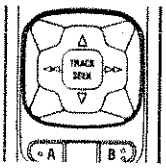


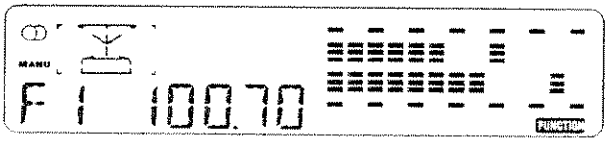


→ F1 → F2 → AM

3. Tune the receiver to a higher or lower frequency.





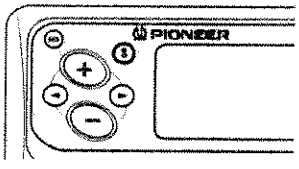


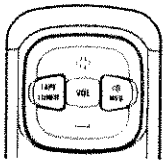
The tuner automatically seeks out and receives broadcasting stations.

Note:

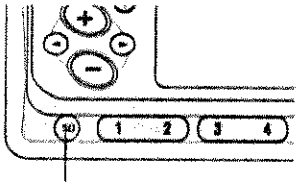
- To select a weak broadcasting station that cannot be tuned in with the Seek Tuning function, follow the steps for "Manual Tuning" on the next page.

4. Raise or lower the volume.

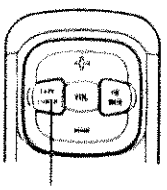




5. Select another source (such as the cassette player) or turn the source OFF. (See page 5.)



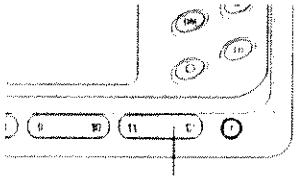
Each press changes the Source ...



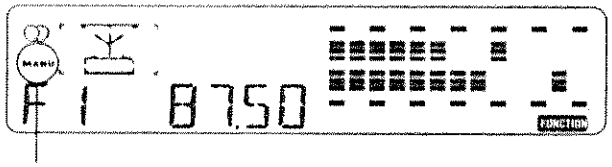
Each press changes the Source ...

Manual Tuning

1. **Switch to the Manual tuning mode.**



HOLD for 2 seconds

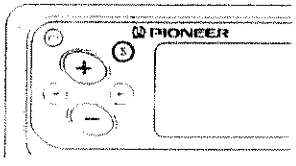


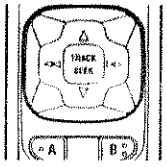
"MANU"

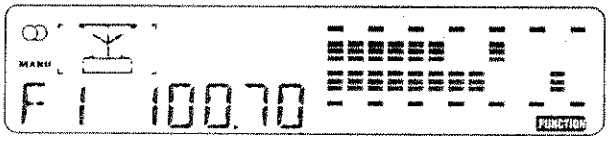
Note:

- If you repeat the preceding operation, the system switches to Seek Tuning mode.

2. **Tune the receiver to higher or lower frequency.**





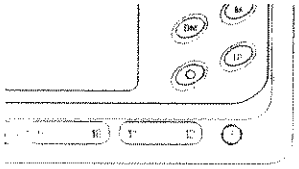


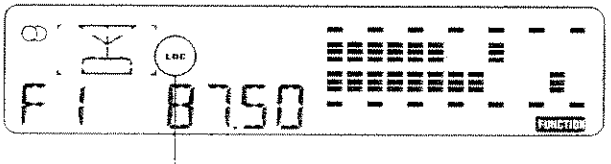
The frequency changes step by step.

Local Seek Tuning

This mode selects only stations with especially strong signals.

- **Enter the Local mode.**





"LOC"

To cancel the Local mode, repeat the preceding operation.

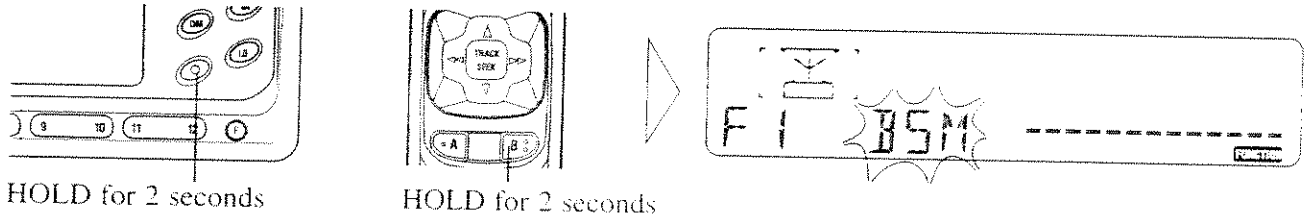
Preset Tuning

Up to 18 FM stations (12 in F1 (FM1) and 6 in F2 (FM2)) and 6 AM stations can be stored in memory.
Store the stations in memory under buttons 1–6 (F1:1–12) beforehand with the BSM (Best Stations Memory) or Preset Memory function.

BSM (Best Stations Memory)

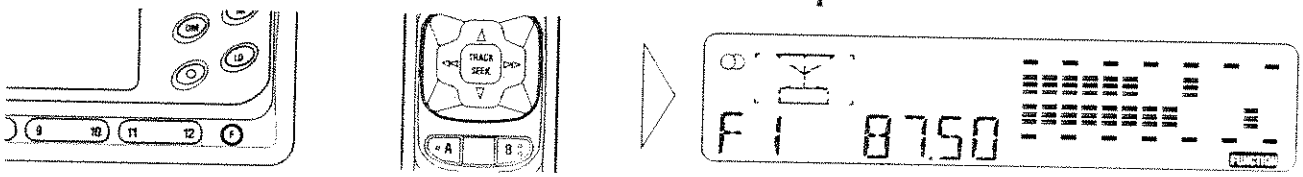
The BSM function stores stations in memory automatically.

- **Enter the BSM mode.**



The stations with the strongest signals will be stored under buttons 1–6 (F1: 1–12) and in order of their signal strength.

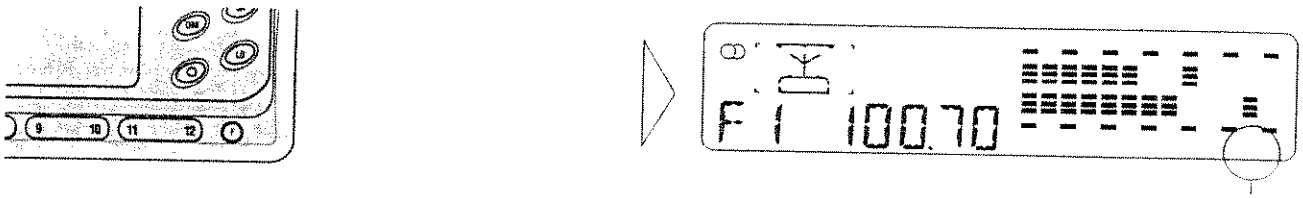
- **To cancel the process before memorization is complete.**



Preset Memory

The Preset Memory function stores stations in memory manually.

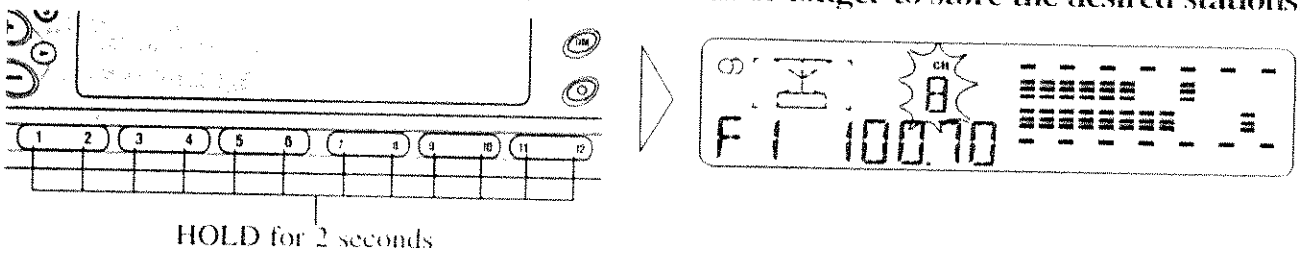
1. **Select the station whose frequency you want to store in memory.**
2. **Turn Function OFF.**



Note:

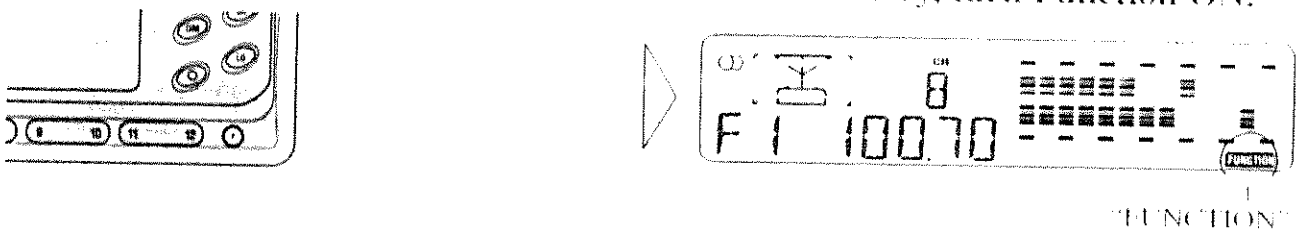
- Preset stations 1–6 can also be selected with Function ON. If F2 band or AM band is selected, switching between Function ON and Function OFF is not possible.

3. **Press one of buttons 1–6 (F1: 1–12) for 2 seconds or longer to store the desired stations.**



The station is stored in memory under the selected button.

4. **When you have stored all the desired stations in memory, turn Function ON.**

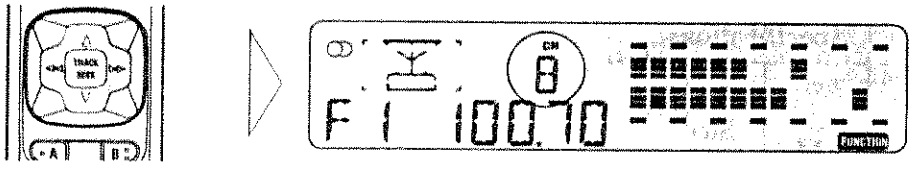


Recalling Preset Stations

There are 2 ways to recall preset stations.

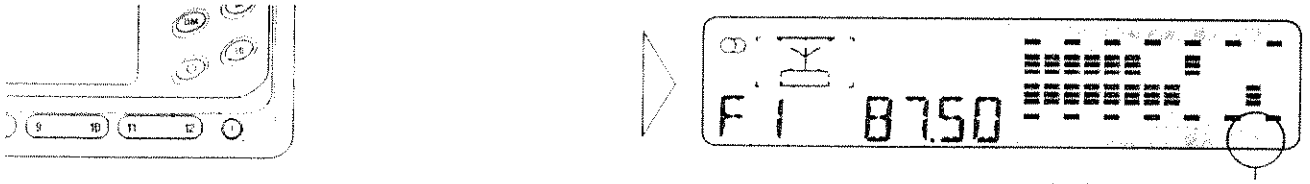
■ Remote Controller:

- **Recall a station preset under buttons 1–6 (F1: 1–12).**



■ Head Unit:

1. Turn Function OFF.

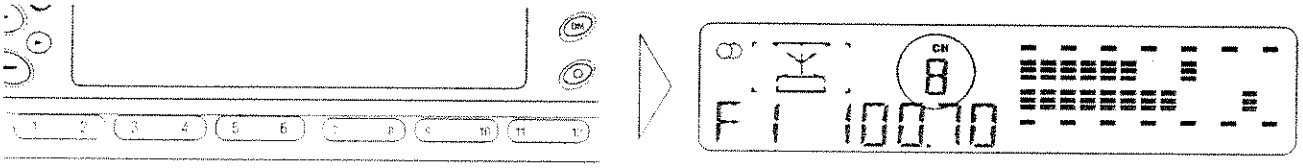


"FUNCTION" disappears

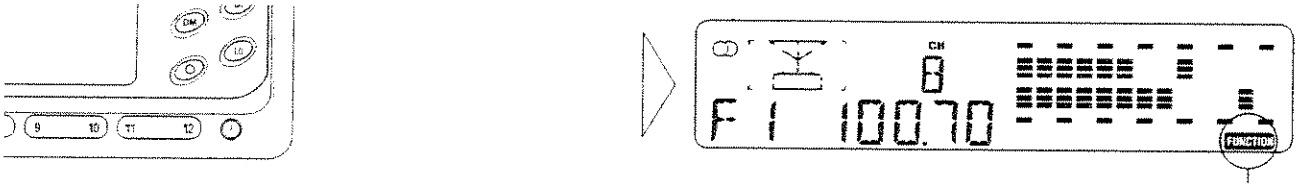
Note:

- Preset stations 1–6 can also be selected with Function ON. If F2 band or AM band is selected, switching between Function ON and Function OFF is not possible.

2. Press one of buttons 1–6 (F1: 1–12) to recall a station preset under that button.



3. Turn Function ON after recalling preset station.



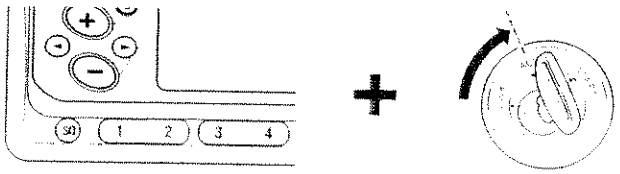
"FUNCTION"

Changing the AM Tuning Step

The tuning step employed in the tuner's AM band can be switched between 9 kHz and 10 kHz per step. Reset the tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America.

Specifications		Initial Setting	New Setting
AM	Tuning Steps	9 kHz	10 kHz
	Frequency range	531— 1,602 kHz	530 — 1,710 kHz

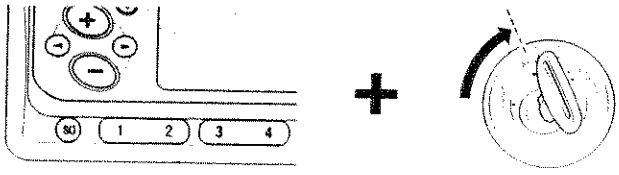
- **While holding down button 2, turn the ignition from OFF (Lock) to ON (ACC).**



Changing the FM Tuning Step

The tuning step employed by Seek Tuning in the FM mode can be switched between 100 kHz (preset at the faegtory) and 50 kHz.

- **While holding down button 1, turn the ignition from OFF (Lock) to ON (ACC).**



Note:

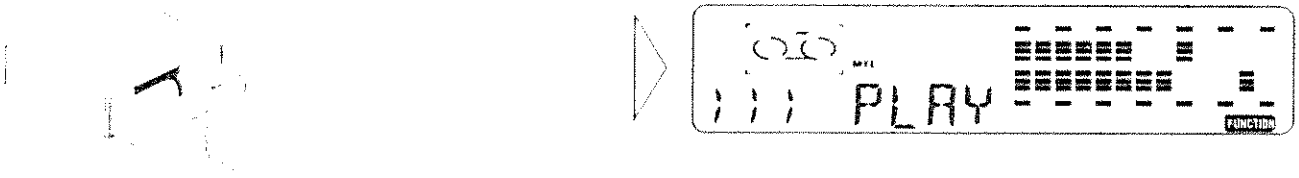
- If Seek Tuning is performed in 50 kHz steps, stations may be tuned in inprecisely. Tune in the stations with Manual Tuning or use Seek Tuning again.

Using the Cassette Player

Basic Operation of Cassette Player

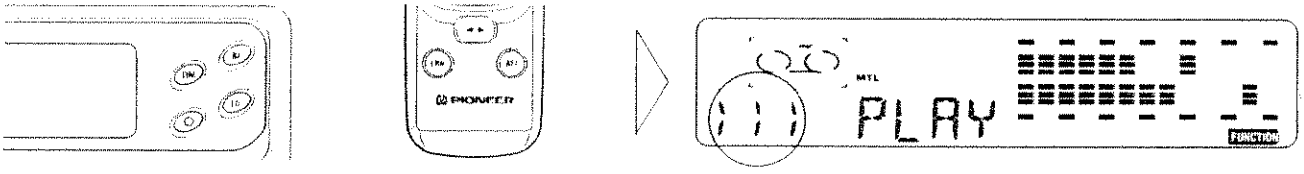
1. **Open the front panel and insert the cassette tape.**

2. **Close the front panel by swinging it gently upward.**

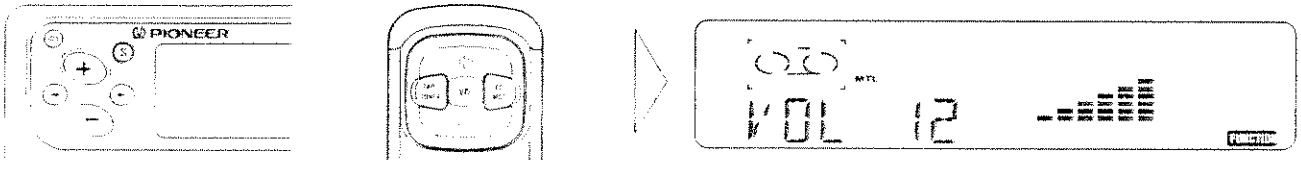


"MTL" appears automatically when a metal or chrome tape is inserted.
Nothing is displayed for a normal tape.

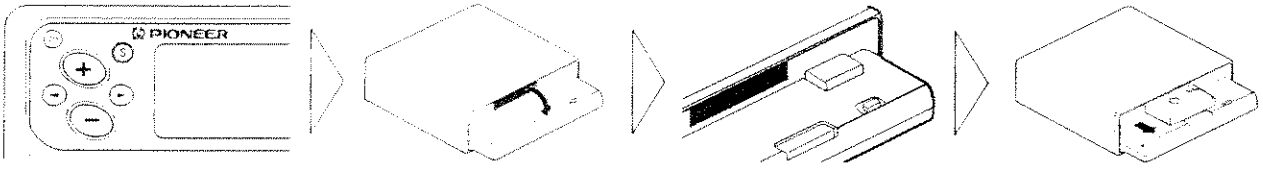
3. **Switch tape playback from side A to side B, or vice versa.**



4. **Raise or lower the volume.**



5. **Open the front panel and remove the cassette tape.**



Be sure to close the front panel after removing the cassette tape.

Note:

- The Tape function can be turned ON/OFF with the cassette tape remaining in this product. See page 5

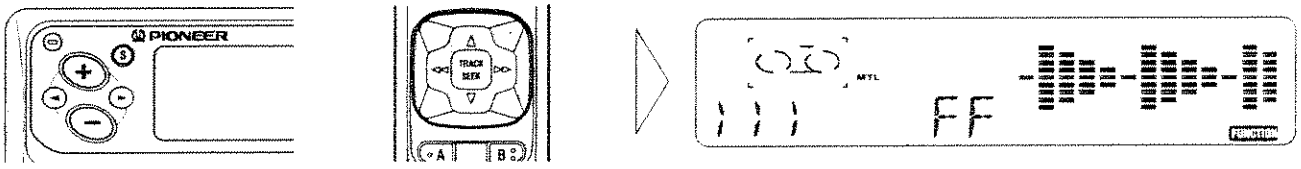
Fast Forward/Rewind and Music Search

■ Fast Forward and Forward-Music Search

- While "FF" is displayed, the system fast-forwards the cassette tape to the end of the current side.
- While "F-MS" is displayed, the system winds the tape forward to the beginning of the next song, then play begins from that point.

• Select the desired mode in the following order:

FF → F-MS → Normal playback



Note:

- Fast Forward (FF) and Forward-Music Search (F-MS) can be canceled by pressing the BA or ◄► button during FF or F-MS operation.

■ Rewind and Rewind-Music Search

- While "REW" is displayed, the system rewinds the cassette tape to the beginning of the current side.
- While "R-MS" is displayed, the system rewinds the tape to the beginning of the current song, then play begins from that point.

• Select the desired mode in the following order:

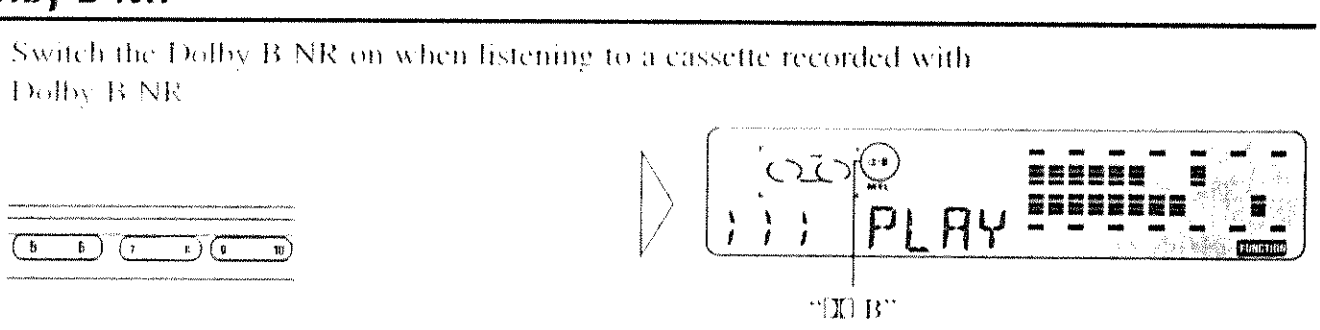
REW → R-MS → Normal playback

Note:

- Rewind (REW) and Rewind-Music Search (R-MS) can be canceled by pressing the BA or ◄► button during the REW or R-MS operation.

Dolby B NR

Switch the Dolby B NR on when listening to a cassette recorded with Dolby B NR.



To cancel the Dolby B NR, repeat the preceding operation.

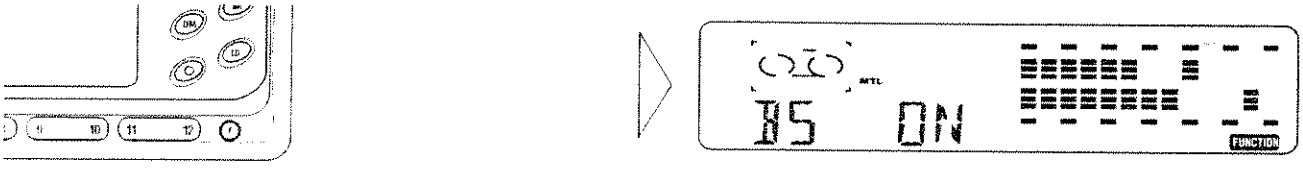
Note:

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Blank Skip

This function fast-forwards to the next song automatically if there is a long period of silence (12 seconds or longer) between songs.

- **Switch the blank skip function ON.**



To cancel the blank skip function, repeat the preceding operation.

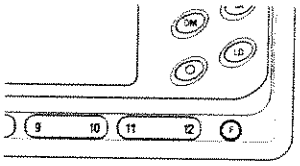
Radio Intercept

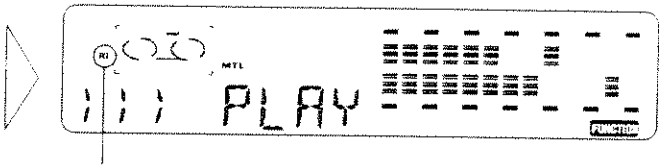
This function allows you to listen to the radio during tape fast-forwarding/rewinding.

Note:

• The radio intercept function does not work during a Music Search operation.

• **Switch to the radio intercept mode.**





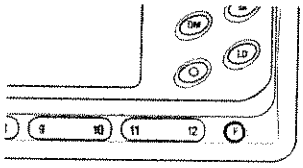
"RI"

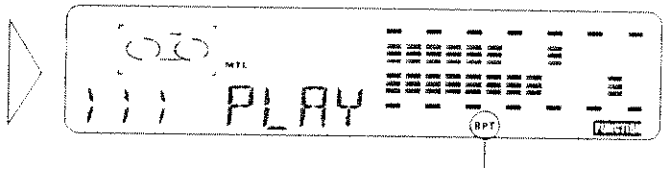
To cancel the radio intercept mode, repeat the preceding operation.

Repeat Playback

The repeat function lets you hear the same song over again.

• **Switch the repeat function ON.**





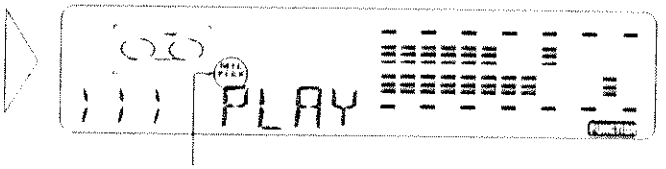
"RPT"

To cancel the repeat function, repeat the preceding operation.

Frequency Level Expander (FLEX)

This feature corrects for reduced high frequencies so that even old tapes and poorly recorded tapes can be enjoyed with better sound quality.

• **Switch the FLEX function ON.**



"FLEX"

To cancel the FLEX function, repeat the preceding operation.

Cassette Player and Care

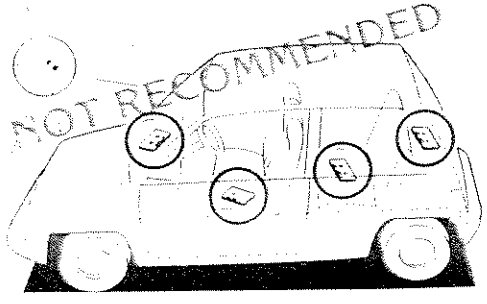
Precaution

■ About the Cassette Player

- A loose or warped label on a cassette tape may interfere with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.
- The music search and repeat functions may not work properly with the following kinds of recorded tapes because the gap between songs cannot be found correctly.
  - A tape with a gap of 4 seconds or less between songs.
  - A tape containing dialog, etc., with pauses lasting for 4 seconds or longer.
  - A tape with an extremely quiet passage in the music lasting for 4 seconds or longer.

■ About Cassette Tapes

- Do not use tapes longer than C-90 type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport.



- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.

Cleaning the Head

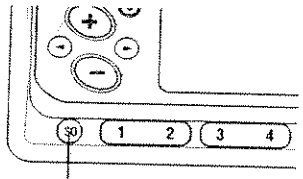
If the heads become dirty, the sound quality will deteriorate and there will be sound dropouts and other imperfections in performance. In this case, the head must be cleaned.

Using CD Player (one disc only)

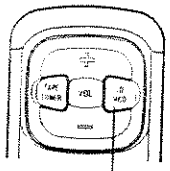
This product can control a CD player (one disc only).

Basic Operation of CD Player

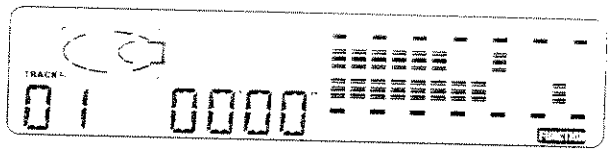
1. **Select the CD player source. (See page 5.)**



Each press changes the Source ...



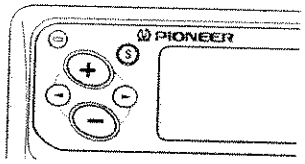
Each press changes the Source ...

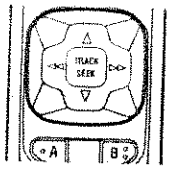


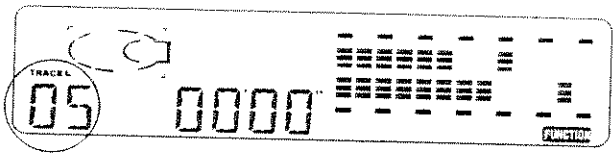
Note:

- The CD player is selected only when a CD is loaded.
- If the CD player cannot operate properly, an error mesage such as "ERROR-14" is displayed. Refer to the CD player owner's manual.

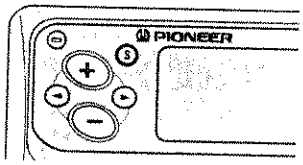
2. **Reverse or advance track by track.**

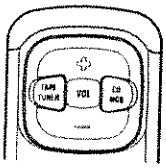


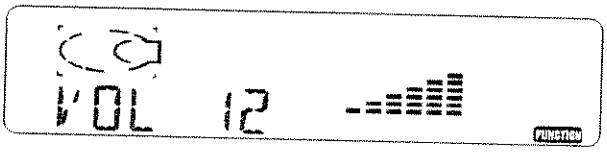




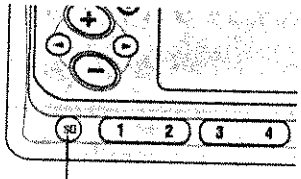
3. **Raise or lower the volume.**



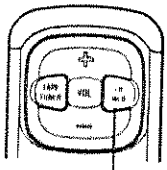




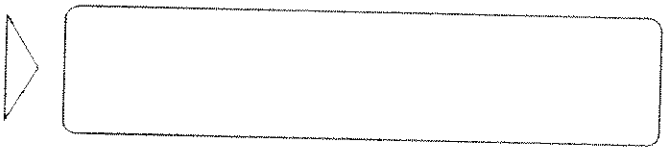
4. **Select another source (such as the cassette player) or turn the source OFF. (See page 5.)**



Each press changes the Source ...



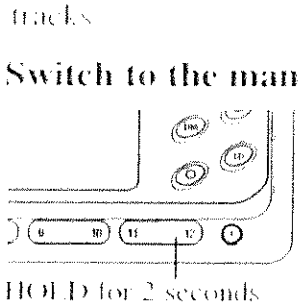
Each press changes the Source ...



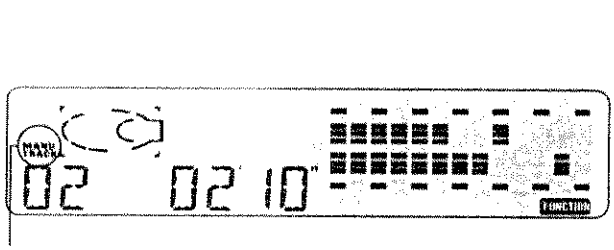
Fast-forward/Reverse

This feature enables you to advance or reverse at high speed between tracks.

1. **Switch to the manual mode.**



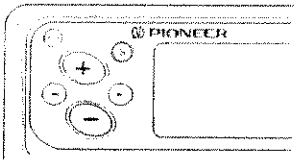
HOLD for 2 seconds.

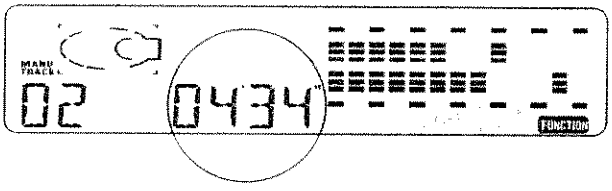


"MANU"

If you repeat the preceding operation, the system switches to Track Search mode.

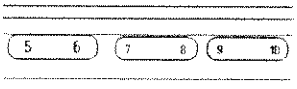
2. **To reverse or fast-forward through tracks, hold down the (◄) or (►) button.**

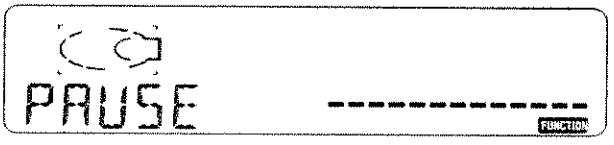




Pause

- **Stop playback temporarily.**





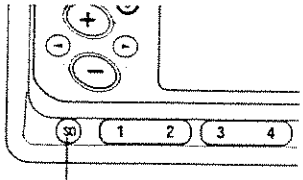
Repeating the preceding operation restarts the system.

Using Multi-CD Players

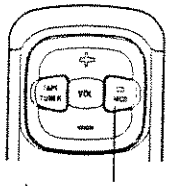
This product can control one or more multi-CD players.

Basic Operation of Multi-CD Players

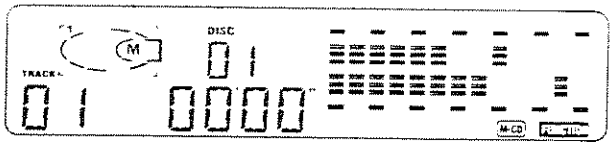
1. **Select the multi-CD player source. (See page 5.)**



Each press changes the Source ...



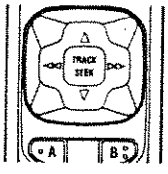
Each press changes the Source ...

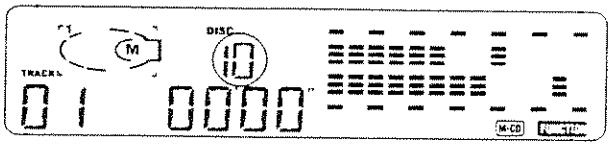


Note:

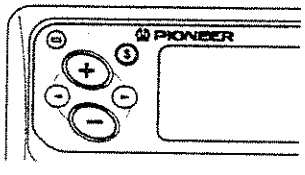
- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
- If the multi-CD player cannot operate properly, an error message such as "ERROR-80" (no disc) is displayed. Refer to the multi-CD player owner's manual.

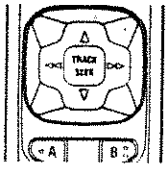
2. **Select the desired disc.**

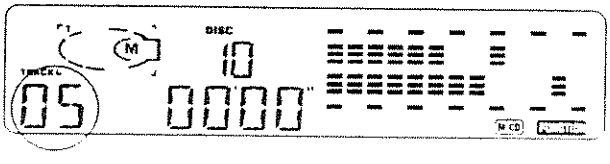




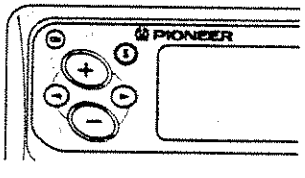
3. **Reverse or advance track by track.**

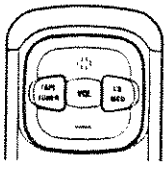


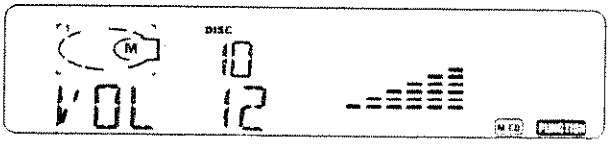




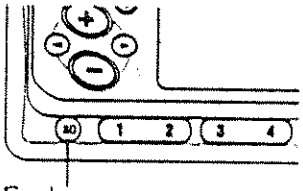
4. **Raise or lower the volume.**



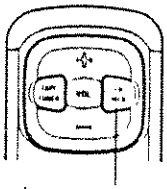




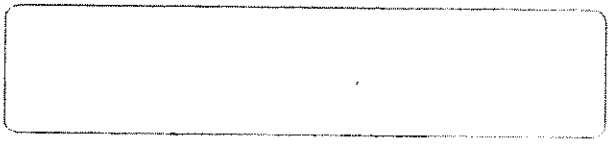
5. **Select another source (such as the cassette player) or turn the source OFF. (See page 5.)**



Each press changes the Source ...



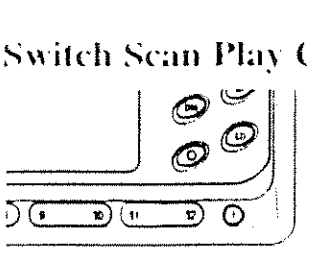
Each press changes the Source ...

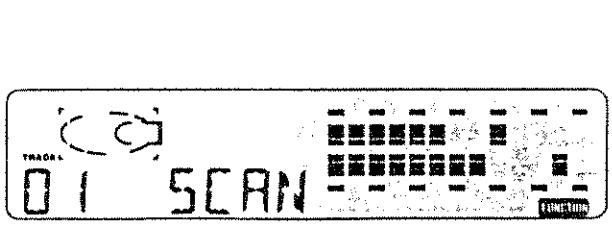


Scan Play

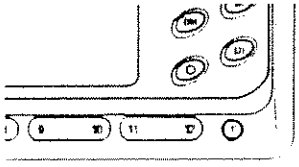
Scan Play plays the first 10 seconds or so of each track on a CD in succession.

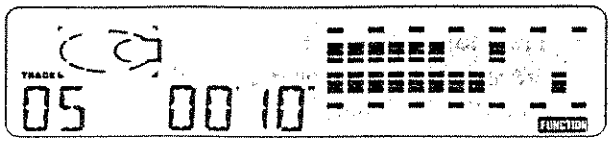
1. **Switch Scan Play ON.**





2. **When you hear the track you are looking for, cancel Scan Play.**





Playback of the current track will continue.

Note:

- Scan Play is canceled automatically after all the tracks on a disc have been scanned.

Disc Title Input

The CD player's Disc Title Input function is possible for up to 100 discs when one or more multi-CD players are installed. (See "Disc Title Input" on page 31 under "Using Multi-CD players.")

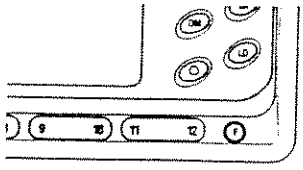
Note:

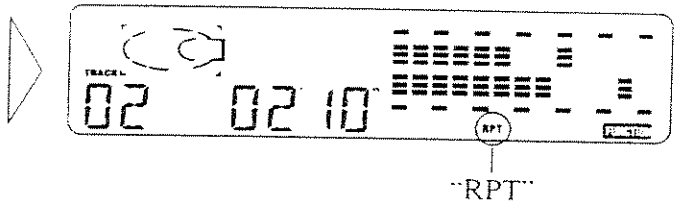
- "Selecting Discs by Title" is a function of the Multi-CD player only.

CD Player Repeat Modes

The CD player offers two repeat modes: Disc Repeat (normal play), the default mode, and One-track Repeat.

- **Select One-track Repeat.**





"RPT"

To return to the Disc Repeat mode (normal play), repeat the preceding operation.

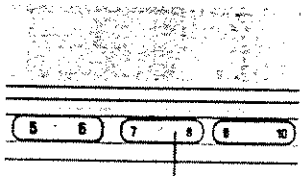
Note:

- When Track Number Search or fast forward/reverse is performed, the mode returns to the default Disc Repeat mode (normal play).

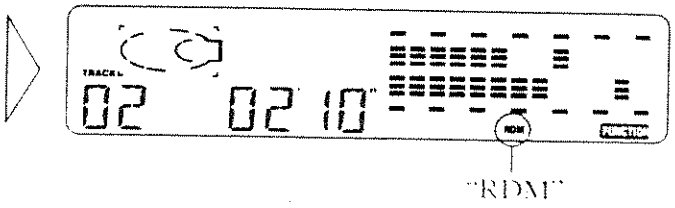
Random Play

The Random Play mode plays the tracks on a CD in random order for variety.

- **Switch Random Play ON.**



HOLD for 2 seconds



"RDM"

Cancel Random Play, repeat the preceding operation.

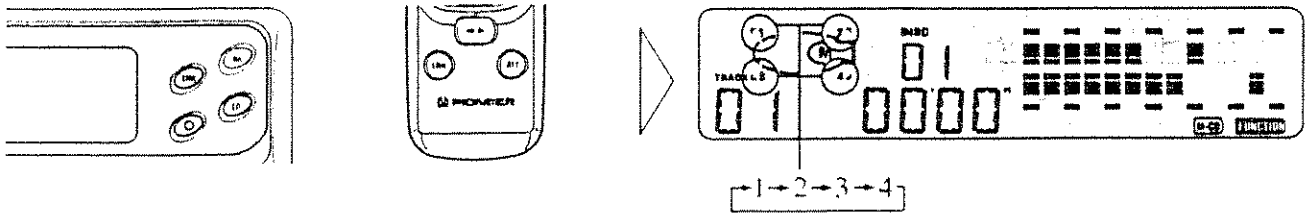
Note:

- Since playback is random, the same track may be repeated consecutively.

Switching the Multi-CD Player

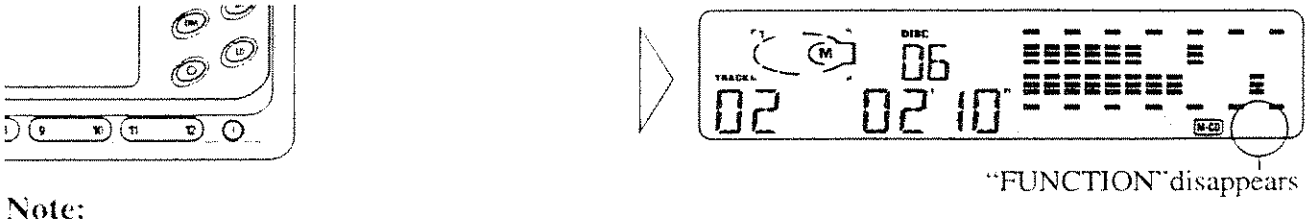
It is possible to connect up to four multi-CD players by means of a multiple installation adapter. When two or more multi-CD players are installed, their priorities must be specified. Follow the multi-CD player instructions carefully, and set the address switches properly.

- **Select the multi-CD player you want to use.**



Using the Head Unit for Disc Number Search

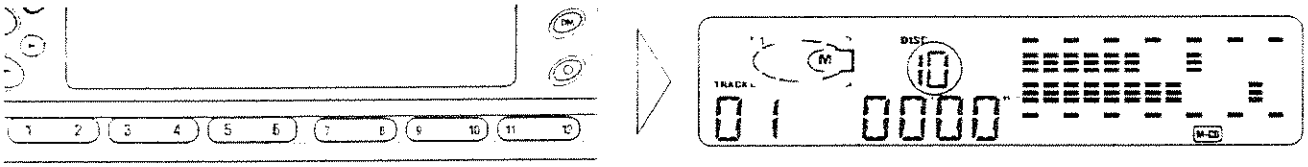
1. Turn Function OFF.



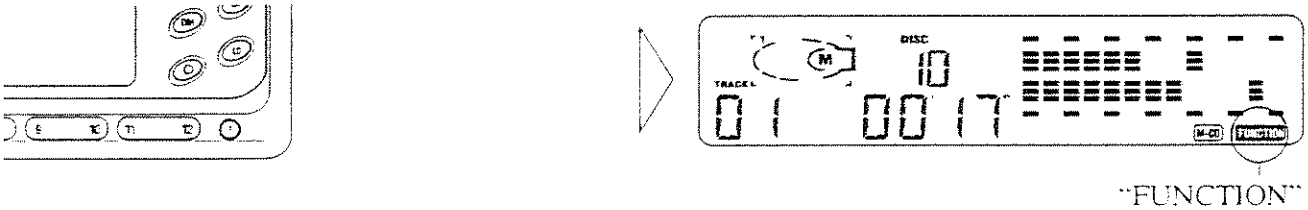
Note:

- Discs 1–6 can also be selected with Function ON. If a six-disc multi-CD player is installed, switching between Function ON and Function OFF is not possible.

2. Press one of buttons 1–12 to select a disc.



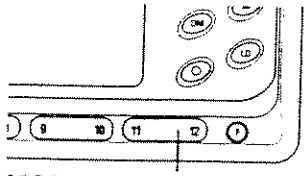
3. Turn Function ON.



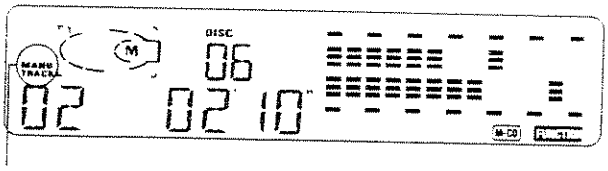
Fast-forward/Reverse

This feature enables you to advance or reverse at high speed between tracks.

1. **Switch to the manual mode.**



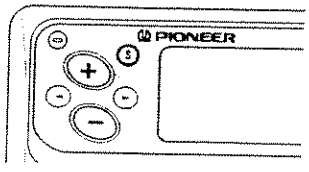
HOLD for 2 seconds

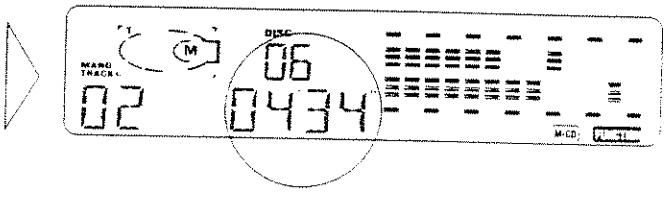


"MANU"

If you repeat the preceding operation, the system switches to Track Search mode.

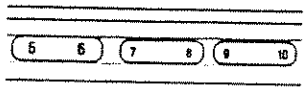
2. **To reverse or fast-forward through tracks, hold down the (◄) or (►) button.**

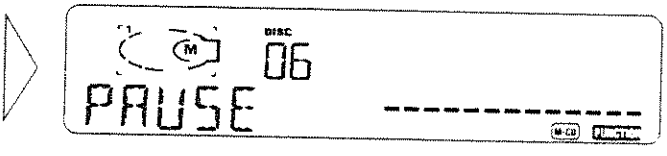




Pause

- **Stop playback temporarily.**





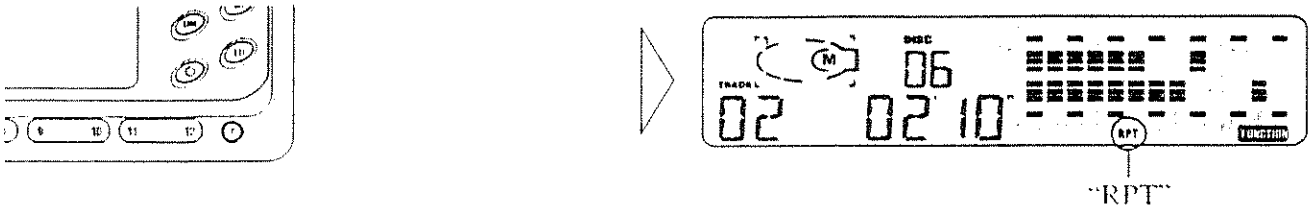
Repeating the preceding operation restarts the system.

Multi-CD Player Repeat Modes

Multi CD players offer four repeat modes: One-track Repeat, Disc Repeat, Multi CD player Repeat and All Repeat. Multi-CD player Repeat is the default mode (normal play) when one or more multi-CD players is installed.

- **Select the desired repeat mode in the following order:**

One-track Repeat ("RPT" indicator lights) → Disc Repeat ("DISC" indicator lights) → Multi-CD player Repeat ("M-CD" indicator lights) → ALL Repeat



Note:

- All Repeat is available only when two or more multi-CD players are installed.

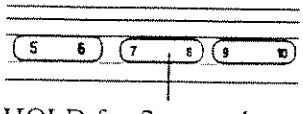
■ Multi-CD player repeat modes

Mode	Operation
One-track Repeat	Plays current track repeatedly. • When Track Number Search or fast forward/reverse is performed, the mode returns to the Disc Repeat mode. • When a different disc or multi-CD player is selected, the mode switches to the Multi-CD player Repeat mode.
Disc Repeat	Plays current disc is played repeatedly. • When a different disc or multi-CD player is selected, the mode switches to the Multi-CD player Repeat mode.
Multi-CD player Repeat (normal play)	Plays all discs loaded in the multi-CD player magazine repeatedly in order, starting with the first disc.
All Repeat	Plays all discs in the magazines of all multi-CD players in order.

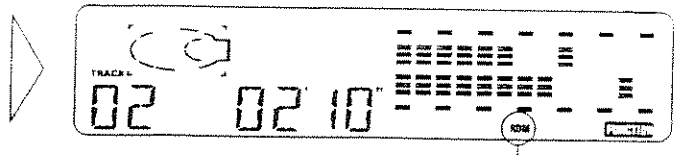
Multi-CD Player Random Play

Random Play is available when one or more multi-CD players are in use.

- **Switch Random Play ON.**



HOLD for 2 seconds



"RDM"

"DISC" indicator lights and "RDM" appears on the display in the One-track Repeat or Disc Repeat mode, "M-CD" indicator and "RDM" in the Multi-CD player Repeat mode and "RDM" in the All Repeat mode.

Cancel Random Play, repeat the preceding operation.

Note:

- Since playback is random, the same track may be repeated consecutively.

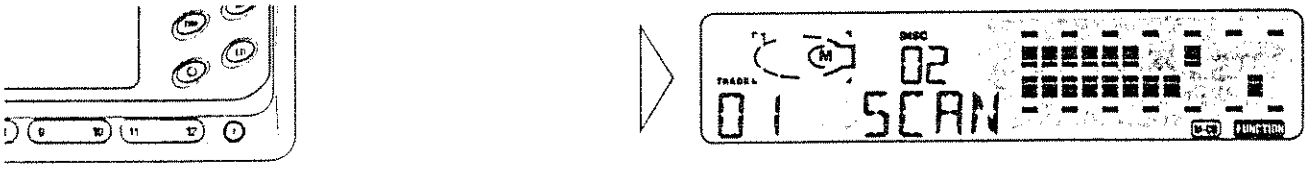
■ Multi-CD player Random Play options

Mode	Operation
One-track Repeat	The mode returns to the Disc Repeat mode, and all tracks on the current disc are played randomly.
Disc Repeat	All tracks on the current disc are played randomly.
Multi-CD player Repeat	All tracks on the discs in the multi-CD player magazine are played randomly.
All Repeat	All tracks on the discs in the magazines of all the installed multi-CD players in order.

Multi-CD Player Scan Play

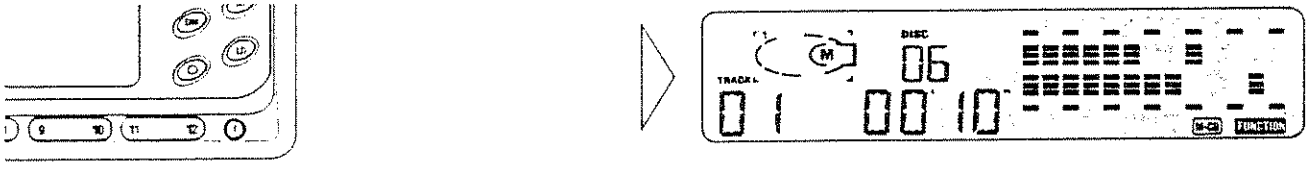
When one or more multi-CD players are installed, the first 10 seconds or so of each track on a disc are scanned in the One-track Repeat and Disc Repeat modes and the first tracks of each disc in the Multi-CD player Repeat and All Repeat modes.

1. Switch Scan Play ON.



"DISC" indicator lights and "SCAN" is displayed in the One-track Repeat or Disc Repeat modes and "M-CD" indicator and "SCAN" in the Multi-CD player Repeat mode and "SCAN" in the All Repeat mode.

2. When you hear the track you are looking for, cancel Scan Play.



Playback of the current track or disc will continue.

Note:

- Scan Play is canceled automatically after all the tracks or discs have been scanned.

■ Multi-CD player Scan Play options

Mode	Operation
One-track Repeat	The mode returns to the Disc Repeat mode and all tracks on the current disc are scanned.
Disc Repeat	All tracks on the current disc are scanned.
Multi-CD player Repeat	The first tracks of all the discs in the multi-CD player magazine are scanned.
All Repeat	The first tracks of all the discs in the magazines of all the installed multi-CDs are scanned.

ITS (Instant Track Selection)

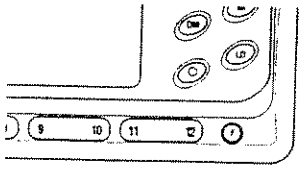
The ITS function allows you to search for the track you wish to play back when one or more multi-CD players are installed. Your multi-CD player's ADPS (Automatic Disc Program Selection) function allows you to carry out Disk Title Input for up to 100 discs and to program up to 99 tracks on each disc for automatic playback. After 100 discs have been programmed, data for a new disc will overwrite the data for the disc that has not been played back for the longest time.

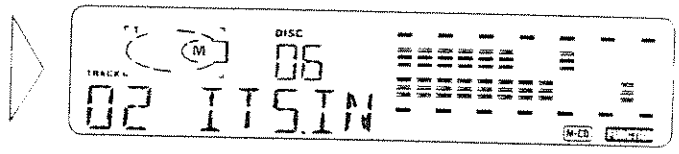
■ ITS Programming

ITS programming can be conducted in any multi-CD player playback mode except ITS playback.

1. Play the track you wish to program.

2. Program the desired track.

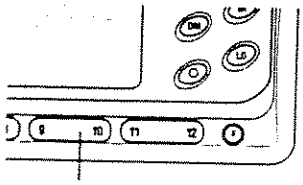




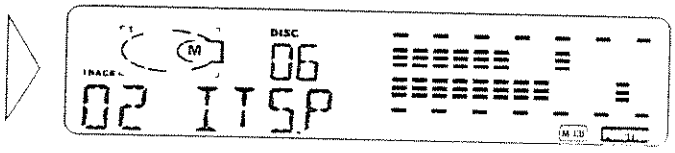
■ ITS Playback

ITS playback can be performed in any repeat mode.

- **The system performs ITS playback.**



HOLD for 2 seconds



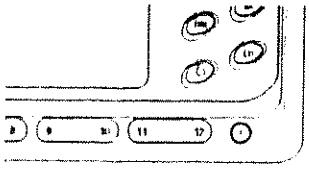
"DISC" indicator lights and "ITS.P" is displayed in the One-track Repeat or Disc Repeat mode, "M-CD" indicator and "ITS.P" in the Multi-CD player Repeat mode and "ITS.P" in the All Repeat mode.

The ITS programmed tracks are played back in order from first to last.

Note:

- If no track in the current range is programmed for ITS playback, "EMPTY" is displayed.

- **To cancel ITS playback.**



■ Multi-CD player ITS play

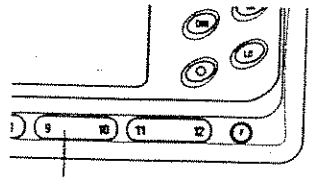
Mode	Operation
One-track Repeat	The mode returns to the Disc Repeat mode and all programmed tracks on the current disc are played.
Disc Repeat	All programmed tracks on the current disc are played.
Multi-CD player Repeat	All programmed tracks on the discs in the multi-CD player magazine are played back. • If there are no programmed tracks on the current disc, ITS advances to the next disc.
All Repeat	The programmed tracks on all the discs in the magazines of all the installed multi-CD are played back. • If there are no programmed tracks on the current disc (or multi-CD player), ITS advances to the next disc (or multi-CD player).

Erasing ITS Programs

ITS programs for up to 100 discs are stored permanently until you erase them.

■ Erase a track program

- **Select the track you wish to erase, then hold down button 9 for 2 seconds or longer during ITS playback.**

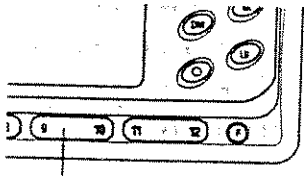


HOLD for 2 seconds

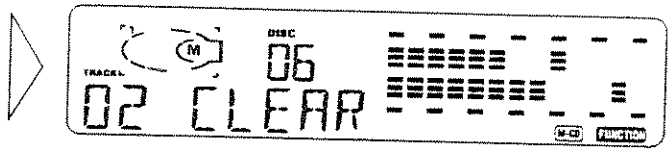
ITS is canceled and playback of the next ITS-programmed track begins. If there are no more programmed tracks in the current range, "EMPTY" is displayed and normal playback resumes.

■ Erase a disc program

- **Select the disc you wish to erase, then hold down button 9 for 2 seconds or longer while the disc is playing.**



HOLD for 2 seconds



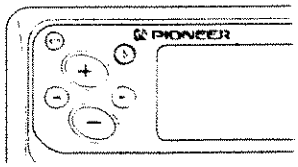
Disc Title Input

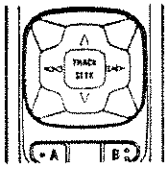
The multi-CD player's ADPS (Automatic Disc Program Selection) function permits entry of up to 100 disc titles comprising up to 8 characters – including titles of ITS-programmed discs – to simplify search and selection of discs for playback.

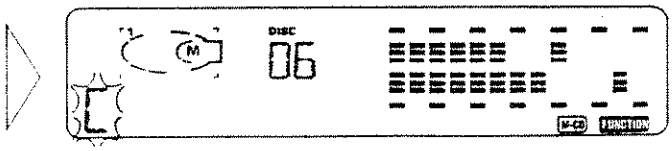
1. After selecting the desired disc, enter the disc title input mode.

HOLD for 2 seconds

2. Select a letter, number or symbol.

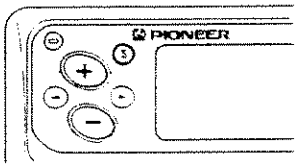


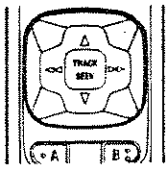


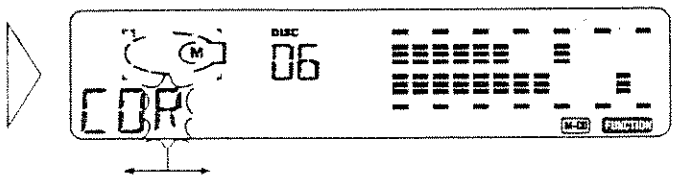


To insert a space, select the flashing cursor.

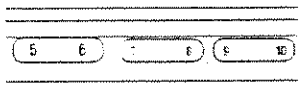
3. Reverse or advance box by box.







4. When the title is completed, store it in memory.



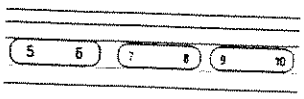
The title remains on the message display.

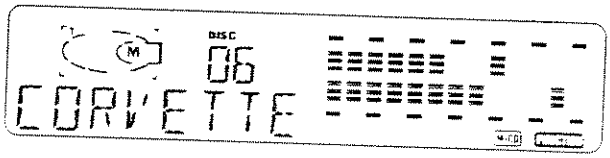
Note:

- Titles remain in memory, even after the disc has been removed from the magazine, and are recalled when the disc is reinserted.
- After the titles for 100 discs have been entered, data for a new disc will overwrite the data for the disc that has not been played back for the longest time. If a Multi-CD player is installed, the data is stored in the Multi-CD player's memory.

■ Displaying Disc Titles

- **Press button 7 during playback to display the title of the current disc.**





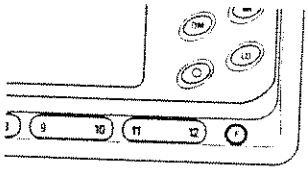
If no title has been input for a disc, "NO TITLE" flashes on the display for 8 seconds, after which the display becomes blank.

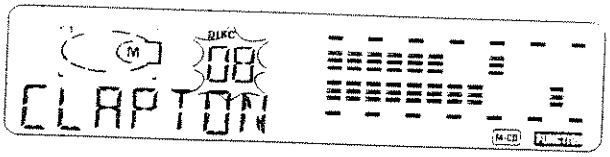
Repeat the preceding operation to return to the normal display.

■ Selecting Discs by Title

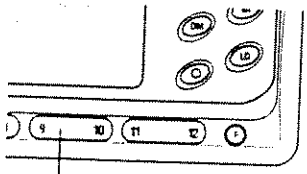
Follow the procedures below to play a disc for which you have input the title in a multi-CD player:

1. **Press button 9 repeatedly to display the titles in the current magazine by disc number in ascending order.**

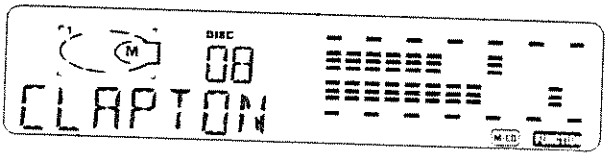




2. **Select the desired disc for playback by pressing button 9 for 2 seconds or longer when its title is displayed.**



HOLD for 2 seconds



If no disc is selected for about 8 seconds, the normal playback display returns automatically.

Note:

- Nothing is displayed for disc whose titles have not been input. The display remains unchanged if the tray is empty.

CD Sound Quality Adjustment

COMP (compression) and DBE (dynamic bass emphasis) functions are available to adjust the sound quality of your PIONEER Multi-CD player. Each can be adjusted in two levels, but they cannot be used together. COMP and DBE can also be used with another multi-CD player which is equipped with these functions. If it is not so equipped, "NO COMP" is displayed when COMP/DBE switching is attempted.

■ COMP

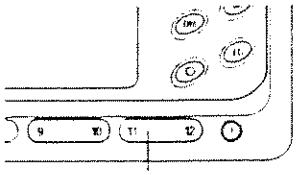
The COMP (compression) function eliminates distortions caused by imbalances between loud and subdued sounds at higher volumes.

■ DBE

DBE (dynamic bass emphasis) boosts bass levels to give a fuller sound.

■ COMP/DBE ON/OFF Switching

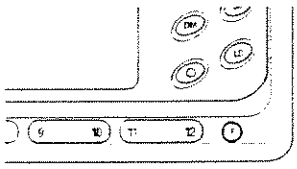
1. Enter the COMP/DBE switching mode.

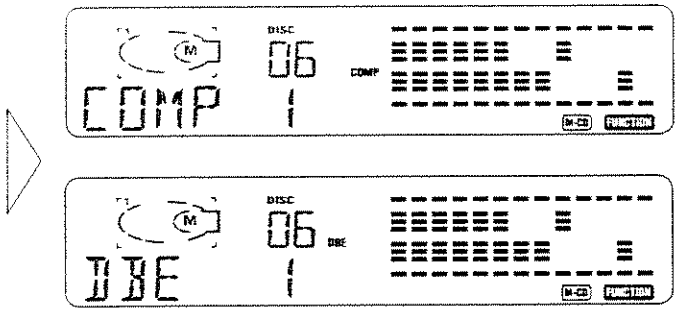


HOLD for 2 seconds

The display reverts to the previous indication after 8 seconds of inactivity.

2. Select the desired mode.



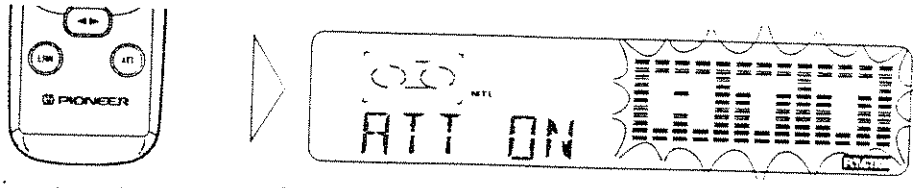


Each press of button 11 switch's the mode in the following order:
COMP 1 → COMP 2 → COMP OFF → DBE 1 → DBE 2 → COMP OFF.

Volume Attenuator

The attenuator reduces the volume instantly.

- **Cut the volume by about 90%.**

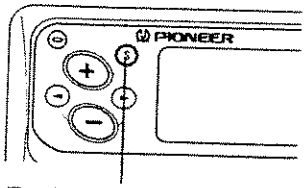


Repeat the preceding operation to return to previous volume.

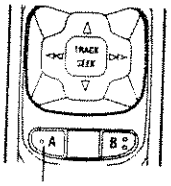
If the (+) or (–) buttons are used to cancel the Attenuator mode, the sound will resume at a lower volume than before.

Selecting Adjustment Mode

- **Select the mode you want to adjust.**



Each press changes the Mode ...



Each press changes the Mode ...

■ Head Unit

Each press of the S button select's the mode in the following order:

F. I. E. mode → Fader/Balance → Bass/Middle/Treble → Volume → Source Level Adjuster mode

■ Remote Controller

Each press of the A button select's the mode in the following order:

F. I. E. mode → Fader/Balance → Bass/Middle/Treble → Source Level Adjuster mode

When audio modes are selected for adjustment, the setting returns to the Volume mode after 8 seconds.

Using the F.I.E. function

The F. I. E. (Front Image Enhancer) function is a simple method of enhancing front imaging by cutting mid- and high-range frequency output from the rear speakers, limiting their output to low-range frequencies.

Precaution:

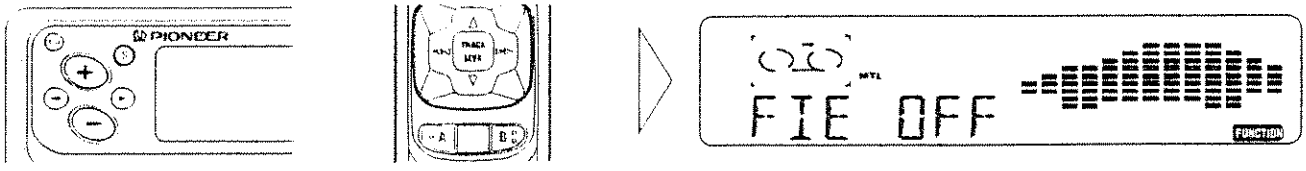
- When the F. I. E. function is deactivated, the rear speakers output sound in all frequencies, not only bass sounds. Reduce the volume before disengaging F. I. E. to prevent a sudden increase in volume.

Note:

- Please set F. I. E. function OFF when using 2 speaker system.

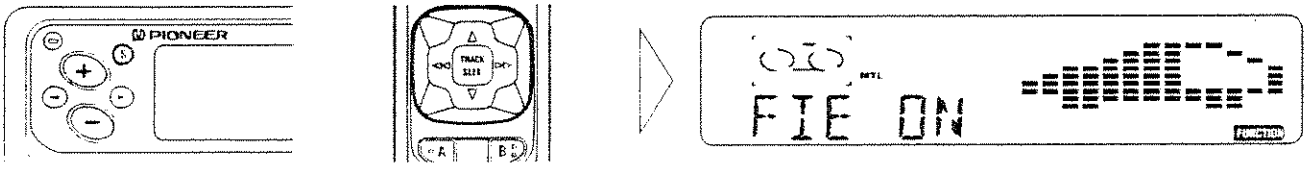
■ Activating the F.I.E. function

1. **Select the F. I. E. mode.**

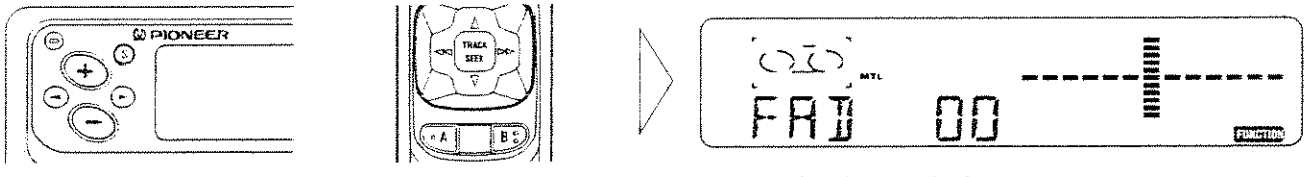


After adjustment use the S or A button to return to the normal display.

2. **Activate the F. I. E. function.**



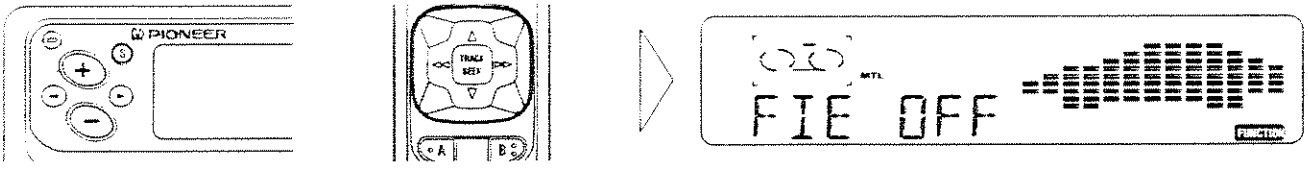
3. **Select the Fader/Balance mode.**



This function adjusts the front and rear speaker volumes for better balanced listening. (Refer to next section.)

■ Deactivating the F.I.E. function

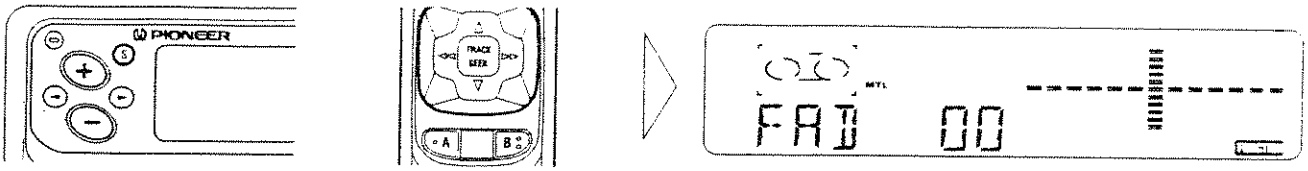
- Cancel the F. I. E. function in the F. I. E. mode.



Balance Adjustment

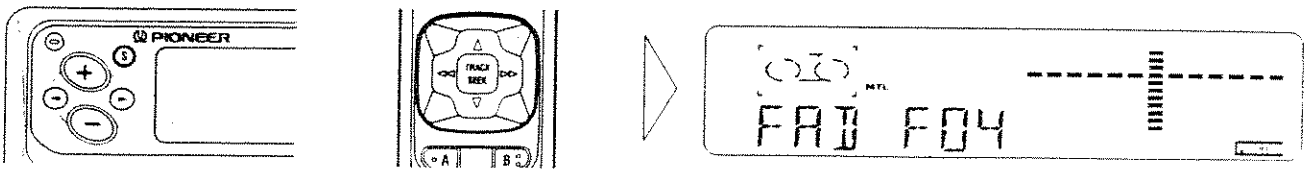
This function allows you to select a Fader/Balance setting that provides ideal listening conditions in all occupied seats.

1. Select the Fader/Balance mode.



After adjustment use the S or A button to return to the normal display.

2. Shift the balance progressively to the front or rear speakers.

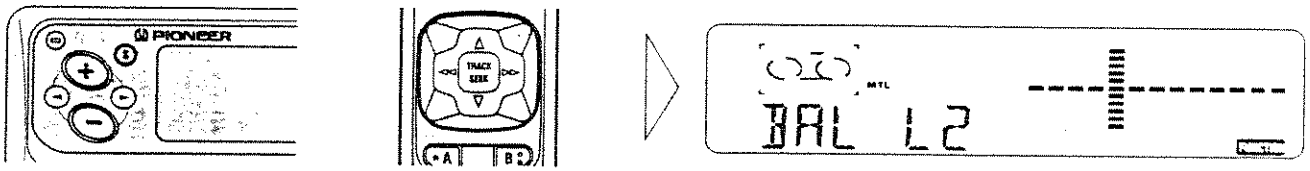


"FAD F15" – "FAD R15" is displayed as it moves from front to rear.

Note:

- "FAD 00" is the proper setting when 2 speakers are in use.

3. Shift the balance to the left or right speaker, respectively.

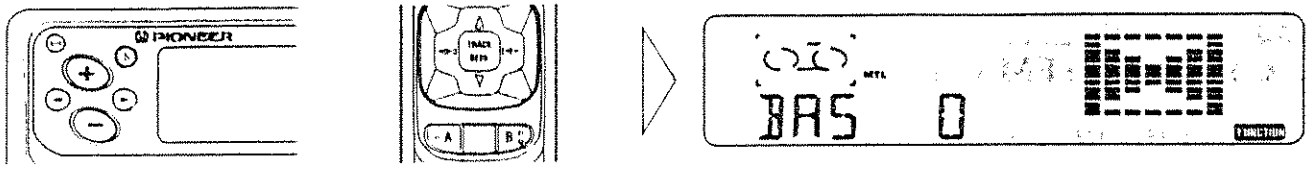


"BAL L9" – "BAL R9" is displayed as it moves from left to right.

Bass/Middle/Treble Adjustment

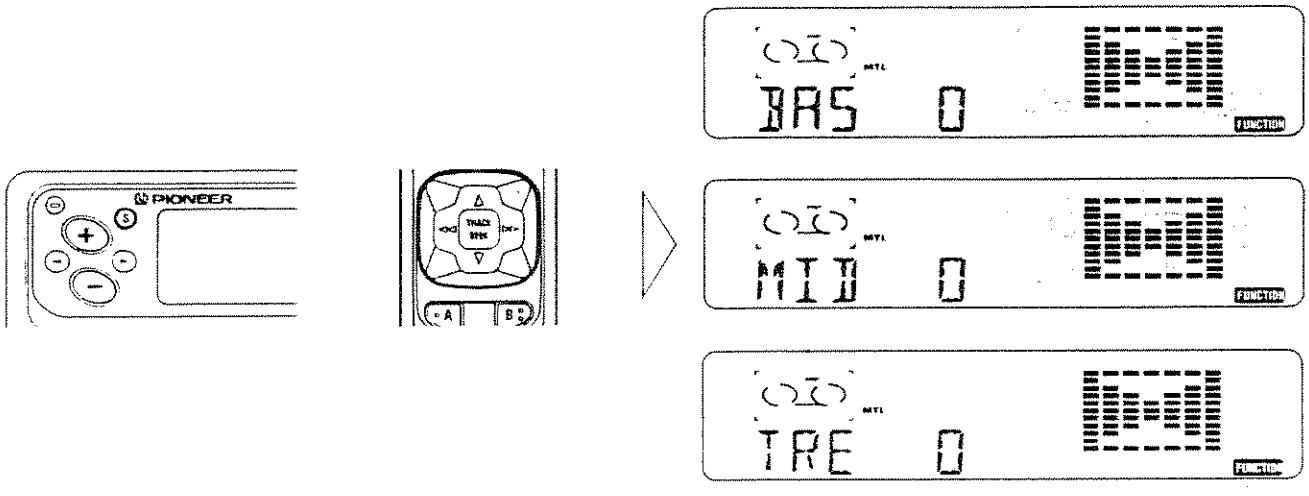
This tuner/cassette player is equipped with three tone adjustment modes, the Bass Adjustment, Middle Adjustment and Treble Adjustment modes. It is possible to select a different tone adjustment setting for each source. The CD player (one disc only) and multi-CD player(s) are set to the same tone adjustment setting automatically.

1. **Select tone adjustment.**

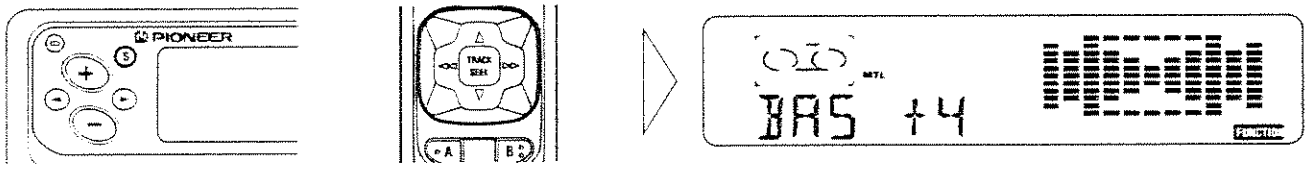


After adjustment use the S or A button to return to the normal display.

2. **Select "Bass Adjustment mode", "Middle Adjustment mode" or "Treble Adjustment mode".**



3. **Increase or decrease the intensity of the bass, middle or treble, whichever is selected.**



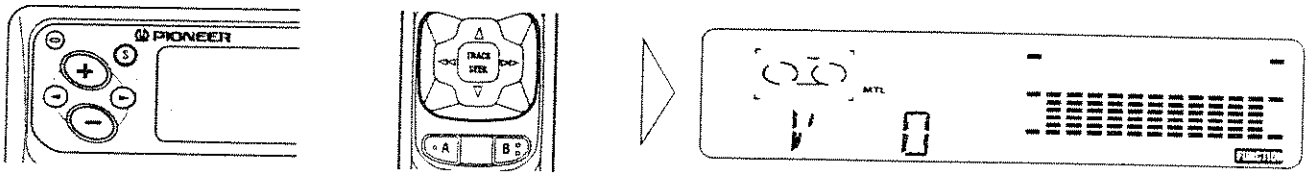
The display shows "BAS–8" – "BAS+4" when you adjust the bass.
The display shows "MID–6" – "MID+6" when you adjust the middle.
The display shows "TRE–6" – "TRE+6" when you adjust the treble.

4. **Repeat steps 2–3 above for the other Bass, Middle or Treble Adjustment mode.**

Source Level Adjustment (SLA)

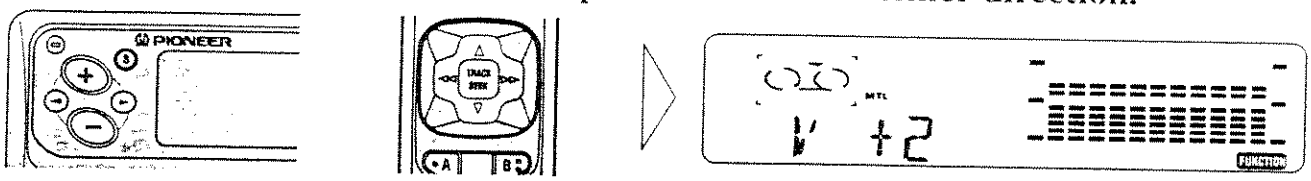
The SLA function prevents radical leaps in volume when switching between sources. Settings are based on the FM volume, which remains unchanged. (Since the FM volume is the control, SLA is not possible in the FM modes.)
The AM, cassette, CD and AUX levels can all be adjusted. The CD player (one disc only) or multi-CD player(s) are set to the same level automatically.

1. **Compare the FM volume with the volume of the other source. (ex. Cassette player.)**
2. **Select the SLA mode.**



After adjustment use the S or A button to return to the normal display.

3. **Adjust the volume up or down in up to four levels in either direction.**

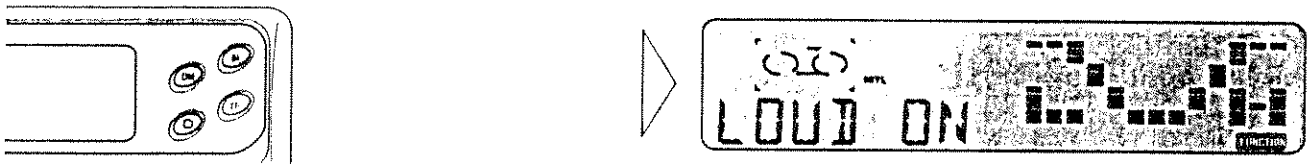


The display shows "V +4" – "V –4".

Loudness Adjustment

The Loudness function compensates for deficiencies in the low and high sound ranges at low volume.

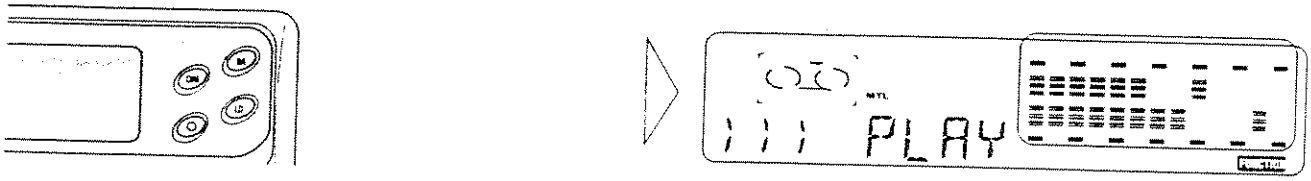
- **Activate the Loudness function.**



To deactivate the Loudness function, repeat the preceding operation.

Display Pattern Switching

- **Select the content of the Display pattern.**



The displayed symbols change in the following order:
Mode 1 → Mode 2 → Mode 3

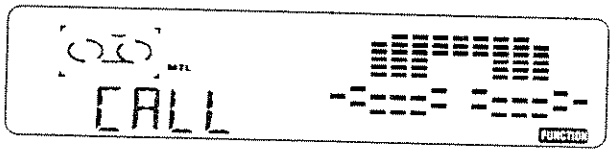
Note:

- Modes 1–2 are Level displays which change patterns depending on the style of music.
- Mode 3 is Level display OFF.

Cellular Telephone Muting

Sound from this system is muted automatically when a call is made or received using a cellular telephone connected to this unit.

- The sound is turned off, "CALL" is displayed and no audio adjustment except volume control is possible. Operation returns to normal when the phone connection is ended.

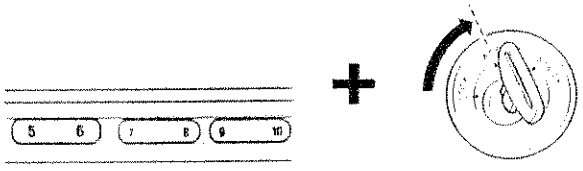


Using the AUX mode

It is possible to use auxiliary (AUX) equipment with this product.
Activate the AUX mode when using external equipment with this product.

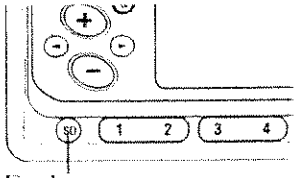
■ AUX mode ON/OFF Switching

- **While pressing button 7, turn the ignition from OFF (Lock) to ON (ACC) position.**

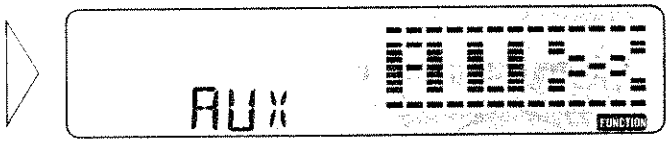


■ Selecting the AUX Mode

- **Select AUX.**



Each press
changes the Source ...



AUX cannot be selected with the remote controller.

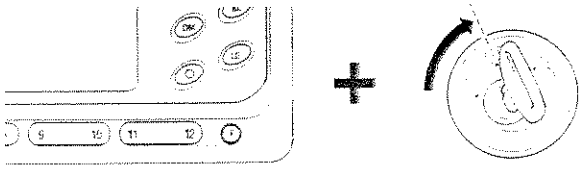
■ AUX Title Input

The display title for AUX mode can be changed. See "Disc Title Input" on page 31 for input procedures.

Illumination ON/OFF Switching Conditions

This unit's illumination is set to light when you switch your car lights ON.
If you perform the following operation, you can also set the unit so that illumination lights when power to the unit is switched ON.

- **To set the unit so that illumination lights when power is switched ON, press button 10 while turning the ignition key from OFF (Lock) to ON (ACC).**



To return to the original setting, repeat the preceding operation.

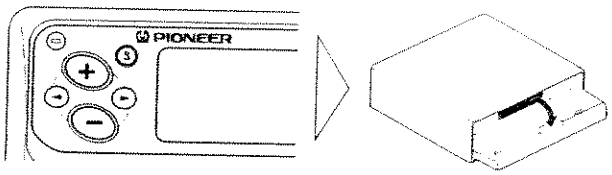
Detaching and Replacing the Front Panel

Theft protection

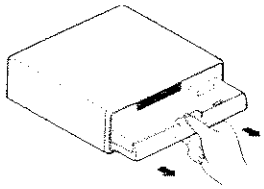
The front panel of the main body is detachable to discourage theft.

■ Detaching the front panel

1. **Open the front panel.**

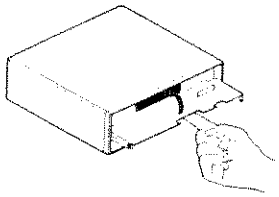


2. **Grip the corrugated release section and pull the front panel gently outward.**



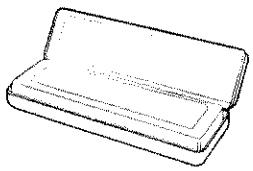
Take care not to grip it tightly or drop it.

3. **Close the inner cover.**



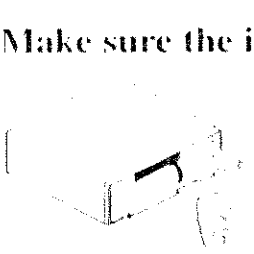
To keep the cassette tape slot free from dust, dirt or other foreign matter.

4. **Use the protective case provided to store/carry the detached front panel.**

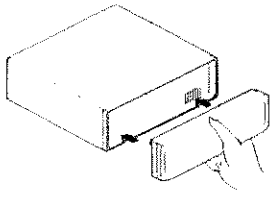


■ Replacing the Front Panel

1. **Make sure the inner cover is closed.**



2. **Replace the front panel by clipping it into place.**



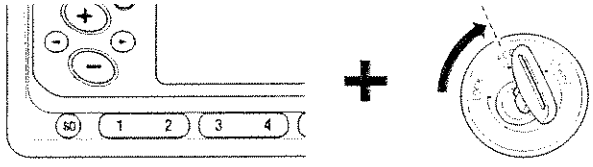
Precaution:

- Never use force or grip the display tightly when removing or replacing the front panel.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.

Warning Tone

If the front panel is not detached within 5 seconds after the ignition is turned off, a warning tone will sound.

- **To cancel the warning tone function, press button 3 while turning the ignition key from OFF (Lock) to ON (ACC).**



Repeat the operation to reset warning tone function.

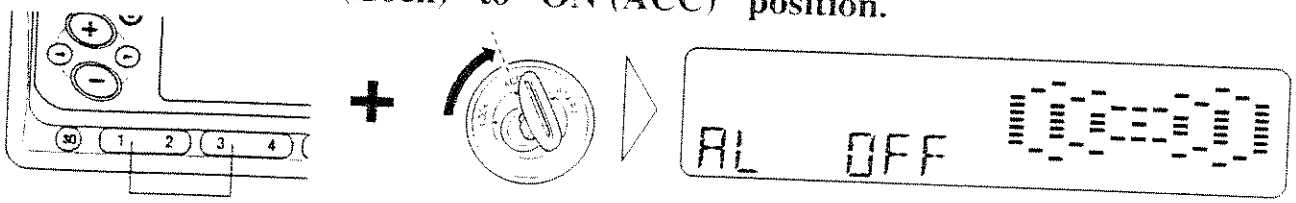
DFS Alarm Function

In addition to the Detachable Face Security of this product, Pioneer has incorporated a new feature "**Detachable Face Security Alarm**". This feature is designed to protect your new Pioneer car stereo as well as your vehicle contents.

DFS Alarm Menu

Pioneer has developed a menu display that allows you to set-up your Alarm to meet your personal needs. By scrolling through this menu it is possible to select your own "Entry Delay Time", "Speaker Output Volume" and "Door System Type".

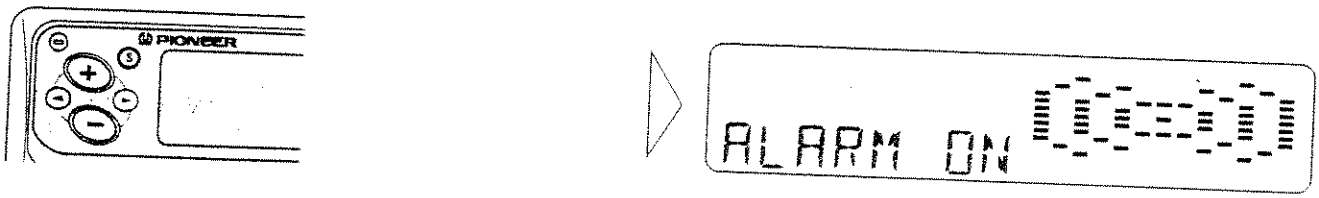
- **To switch the DFS Alarm Menu, while pressing buttons 1 and 3, turn the ignition from the "OFF (Lock)" to "ON (ACC)" position.**



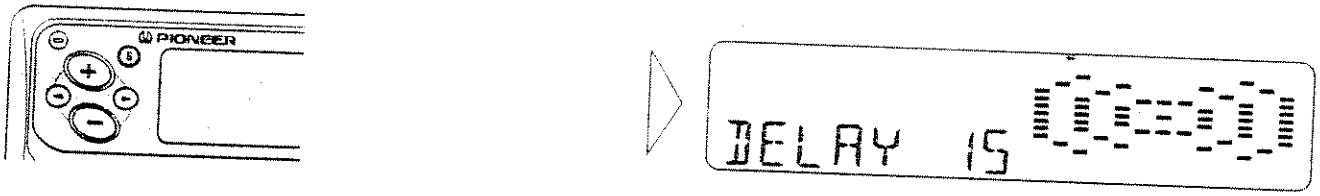
Activating the DFS Alarm Feature

Initially from the factory the DFS Alarm feature is not activated.

1. **Activate Alarm.**



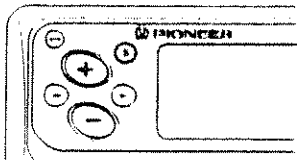
2. **Advance to next selection.**

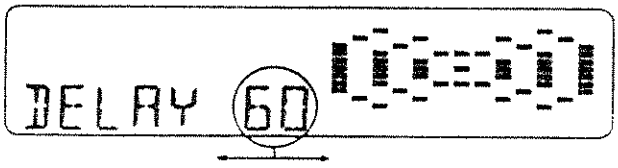


Setting Entry Delay Time

Initially the "Entry Delay Time" is set to 15 seconds. The Entry Delay Time can be adjusted to be 0, 5, 15, 30, 45 or 60 seconds.

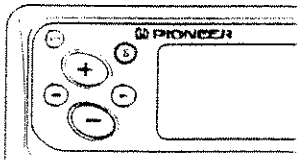
1. **Decrease or increase the "Entry Delay Time".**

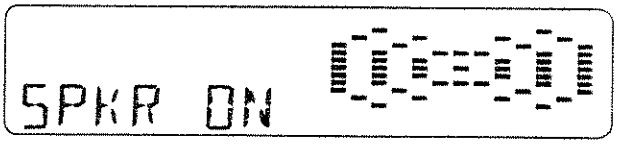




0, 5, 15, 30, 45, 60

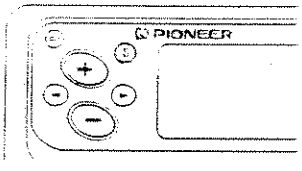
2. **Advance to next selection.**

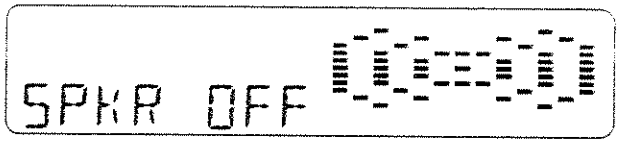




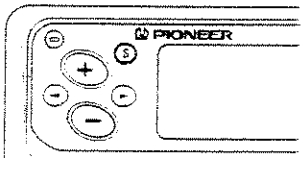
Activating Internal Speaker On/ Off

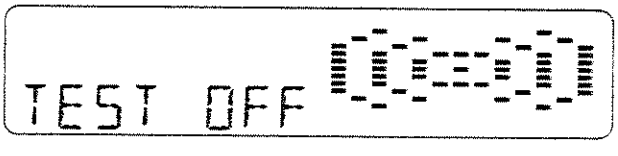
This feature allows you to select whether or not the speaker output is sounded when the "DFS Alarm" is triggered. Initially from the factory the speaker output is activated. You can defeat the internal speaker output by pressing the (◄) button. (If you switch speaker output OFF, then press the (+) button to select Next Selection, you advance directly to the next selection without the need to perform "Speaker Volume Output Adjustment" operations.)





- **Advance to next selection.**





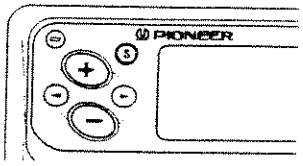
Speaker Volume Output Adjustment

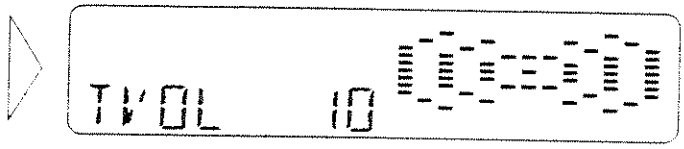
Note:

- If the Speaker Output has been selected to be OFF; then this menu will not appear.

If the Speaker Output has been selected then it is possible to adjust the volume of the speaker output for when the Alarm is triggered. To adjust the volume you must engage the "TEST MODE".

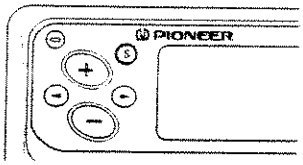
1. **Engage the "TEST MODE".**

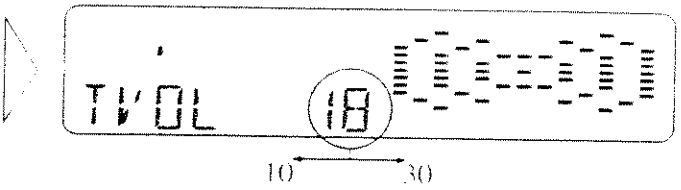




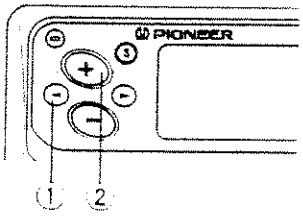
In this test mode the speakers will sound.

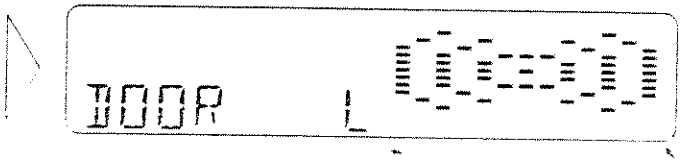
2. **Decrease or increase the volume.**





3. **After selecting your preferred volume setting, cancel the Test Mode. Advance to the next selection.**

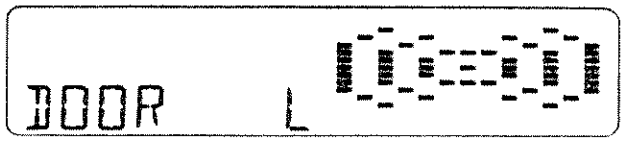




Selecting Door Switching Systems

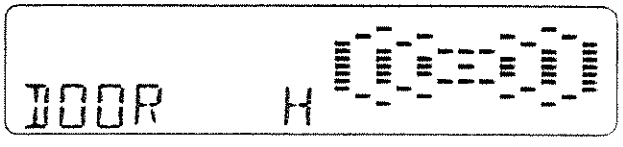
It is necessary to select the correct Door System Type (Negative or Positive switching) for that of your vehicle. Initially, the system is set for vehicles with the grounding type (Negative switching).

(–)
GM, CHRYSLER, EUROPEAN, JAPANESE



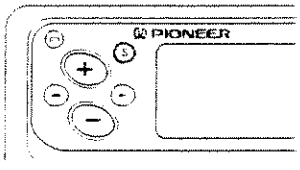
Select the correct Door system type for your vehicle from the table oppo site. (eg. Set to "DOOR L" for GM vehicles.)

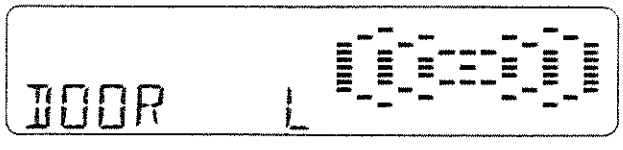
(+)
FORD, JAGUAR, MERCEDES*, etc.

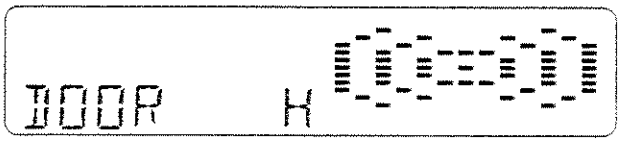


* Some Models Only.

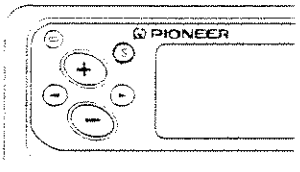
1. Change from "DOOR L" to "DOOR H".

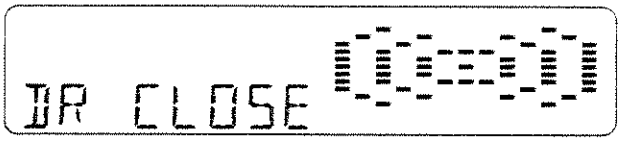






2. Advance to next selection.

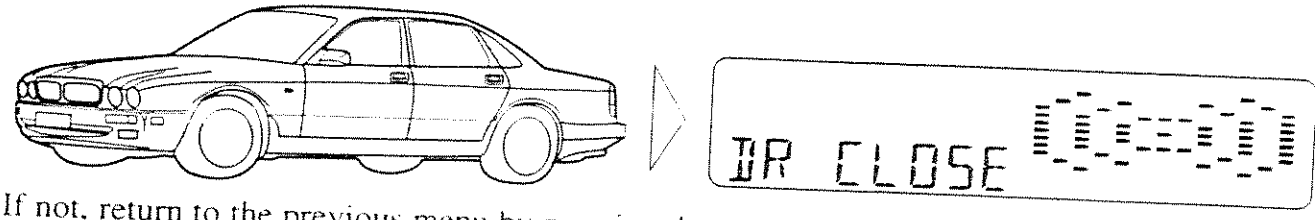




Door System Confirmation

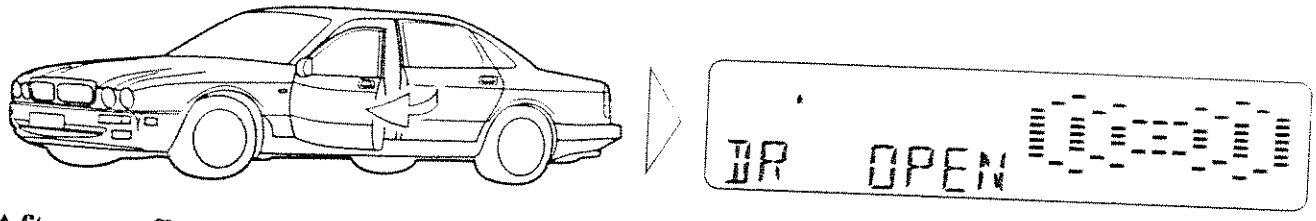
The door system confirmation feature was incorporated to ensure that the correct door system type has been selected.

1. **Firstly, close all the doors. If the correct door system type has been selected the the Display will show "DR CLOSE".**

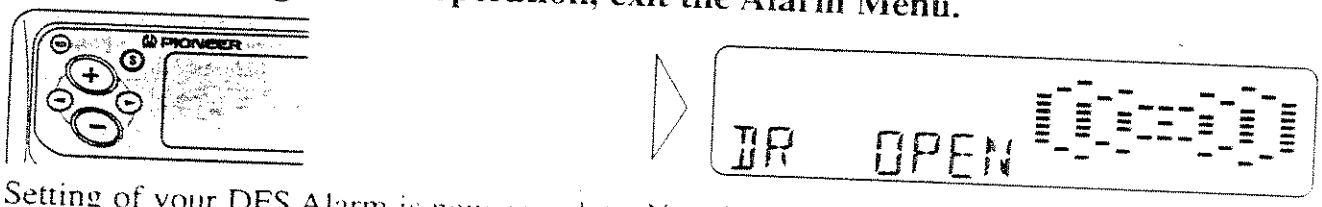


If not, return to the previous menu by pressing the (–) button and select the alternative door system type. Lastly, confirm each door triggers the Alarm by opening and closing each door.

As the door is opened the display should change accordingly ("DR CLOSE" – "DR OPEN").



2. **After confirming correct operation, exit the Alarm Menu.**



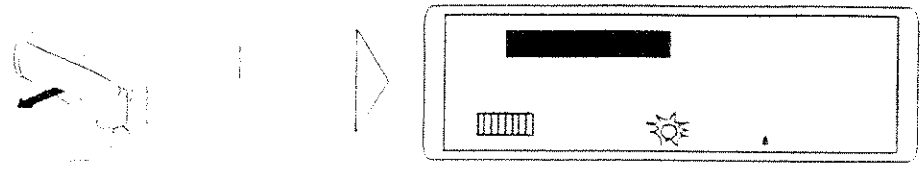
Setting of your DFS Alarm is now complete. Note in the case that the battery is disconnected or the reset button is pressed, it may be necessary to re-program the DFS Alarm Menu; otherwise this setting needs to be done only once.

Operation

Providing the installation and setting of the DFS Alarm Menu has been performed correctly, operation of the DFS Alarm is very simple.

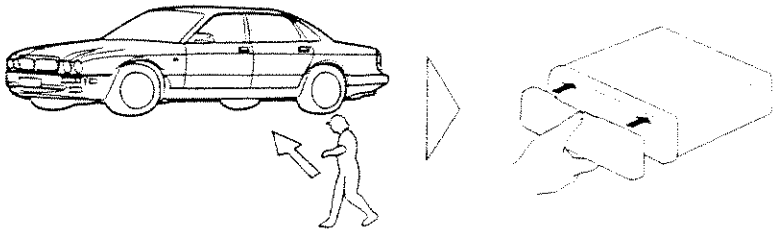
Arming Alarm

To arm your Alarm simply turn off the ignition and detach the front panel, as described on page 44. After detaching the front panel the DFS Alarm will automatically arm itself after 30 seconds, providing all of the doors are closed. If after 30 seconds, a door still remains open the DFS Alarm will not arm until the last door has been closed. After closing all of the doors, ensure that they are securely locked. The LED indicator on the head unit will flash as a visual deterrent. Your vehicle is now protected by your DFS Alarm.



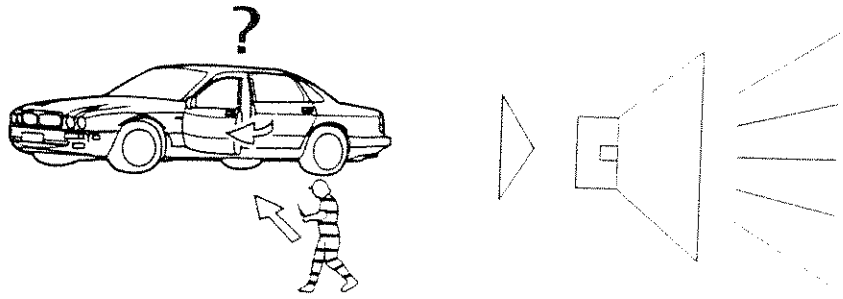
Disarming Alarm

Upon entering your vehicle, and within the "Entry Delay Time" set within the DFS Alarm Menu, attach your Pioneer front panel as described on page 45. If you have forgotten your detachable face simply insert your ignition key and turn it to the "ON" position within the "Entry Delay Time". This will disarm your Alarm.



Entry Detection

If after the "Entry Time Delay" has elapsed and neither the front panel was replaced nor the ignition turned "ON"; then the DFS Alarm will be triggered and the speakers (if activated in the DFS Alarm Menu) will sound. The DFS Alarm will sound for 60 seconds and will repeat 5 times if any door is left open or reopened. After the fifth time the DFS Alarm will reset to prevent continuous sounding and prevent your battery from discharging.



Precaution:

- Upon returning to your vehicle and before opening any doors, check to see if the LED indicator is still flashing. If the LED is no longer flashing, it indicates that the Alarm has sounded. Disarming, as described above, is still necessary.

Specifications

General

Power source		14.4 V DC (10.8 — 15.1 V allowable)
Grounding system		Negative type
Max. current consumption		8.5 A
Dimensions		
(DIN)	(chassis)	178 (W) × 50 (H) × 151 (D) mm
	(nose)	188 (W) × 58 (H) × 16 (D) mm
(D)	(chassis)	178 (W) × 50 (H) × 156 (D) mm
	(nose)	170 (W) × 46 (H) × 11 (D) mm
Weight		1.4 kg

Amplifier

Continuous power output is 15 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output	35 W × 4
Continuous power output	15 W × 4 (1% dist. at 1 kHz)
Load impedance	4 Ω (4 — 8 Ω allowable)
Preout output level/output impedance	500 mV/ 1 kΩ
Tone controls	
(Bass)	±12 dB (80 Hz)
(Middle)	±12 dB (400 Hz)
(Treble)	±12 dB (10 kHz)
Loudness contour	+10 dB (100 Hz), +7 dB (10 kHz) (volume: –30 dB)

Cassette player

Tape	Compact cassette tape (C-30 — C-90)
Tape speed	4.8 cm/sec.
Fast forward/rewinding time	Approx. 100 sec. for C-60
Wow & flutter	0.09% (WRMS)
Frequency response	Metal: 30 — 19,000 Hz (±3 dB)
Stereo seperation	45 dB
Signal-to-noise ratio	Metal: Dolby B NR IN: 67 dB (IEC-A network) Dolby NR OUT: 61 dB (IEC-A network)

Specifications

FM tuner

Frequency range	87.5 — 108 MHz
Usable sensitivity	11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio	70 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 — 15,000 Hz (±3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range	531 — 1,602 kHz (9 kHz)
	530 — 1,710 kHz (10 kHz)
Usable sensitivity	18 µV (25 dB) (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)
	50 dB (±10 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

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